

**Log Tank Service**

# **API Reference**

**Issue**            01  
**Date**             2025-02-14



**Copyright © Huawei Cloud Computing Technologies Co., Ltd. 2025. All rights reserved.**

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Cloud Computing Technologies Co., Ltd.

## **Trademarks and Permissions**



HUAWEI and other Huawei trademarks are the property of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

## **Notice**

The purchased products, services and features are stipulated by the contract made between Huawei Cloud and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

---

# Contents

---

<b>1 Before You Start.....</b>	<b>1</b>
<b>2 API Overview.....</b>	<b>3</b>
<b>3 Calling APIs.....</b>	<b>5</b>
3.1 Making an API Request.....	5
3.2 Authentication.....	9
3.3 Response.....	10
<b>4 API Calling Examples.....</b>	<b>13</b>
<b>5 Examples.....</b>	<b>14</b>
5.1 Example 1: Creating a Log Group.....	14
5.2 Example 2: Querying All Log Groups of an Account.....	14
5.3 Example 3: Creating a Log Stream.....	15
5.4 Example 4: Querying All Log Streams in a Log Group.....	16
5.5 Example 5: Transferring Logs to OBS.....	16
<b>6 APIs.....</b>	<b>18</b>
6.1 Host Group Management.....	18
6.1.1 Querying Host Information.....	18
6.1.2 Querying Host Groups.....	28
6.1.3 Creating a Host Group.....	37
6.1.4 Deleting a Host Group.....	45
6.1.5 Modifying a Host Group.....	52
6.2 Log Group Management.....	57
6.2.1 Creating a Log Group.....	57
6.2.2 Querying All Log Groups of an Account.....	65
6.2.3 Deleting a Log Group.....	68
6.2.4 Modifying a Log Group.....	72
6.3 Log Stream Management.....	80
6.3.1 Creating a Log Stream.....	80
6.3.2 Querying All Log Streams in a Specified Log Group.....	88
6.3.3 Querying Log Streams.....	92
6.3.4 Deleting a Log Stream.....	97
6.3.5 Creating an Index for a Specified Log Stream.....	101

6.3.6 Modifying a Log Stream.....	111
6.4 Log Management.....	119
6.4.1 Collecting Traffic Statistics on Top N Log Groups or Log Streams.....	119
6.4.2 Querying Resources by Time Segment.....	127
6.4.3 Querying Logs.....	134
6.4.4 Querying Structured Logs (Not Recommended).....	165
6.4.5 Querying Structured Logs (New Version).....	178
6.4.6 Querying the Log Histogram.....	195
6.4.7 Querying Context Logs.....	201
6.4.8 Removing from Favorites.....	211
6.4.9 Adding a Log to Favorites.....	216
6.5 Log Ingestion.....	223
6.5.1 Creating a cross-account log ingestion configuration.....	223
6.5.2 Querying Log Ingestion Configurations.....	233
6.5.3 Creating a Log Ingestion Configuration.....	255
6.5.4 Deleting Log Ingestion Configurations.....	297
6.5.5 Modifying a Log Ingestion Configuration.....	315
6.6 Log Transfer.....	348
6.6.1 Creating a Log Transfer Task (Old Version).....	348
6.6.2 Creating a Log Transfer Task (New Version).....	357
6.6.3 Deleting a Log Transfer Task.....	381
6.6.4 Updating a Log Transfer Task.....	391
6.6.5 Querying a Log Transfer Task.....	415
6.6.6 Registering a DMS Kafka Instance.....	426
6.7 Log Collection Beyond Free Quota.....	432
6.7.1 Disabling Log Collection Beyond Free Quota.....	433
6.7.2 Enabling Log Collection Beyond Free Quota.....	435
6.8 Cloud Log Structuring.....	438
6.8.1 Creating Structuring Configurations (Recommended).....	438
6.8.2 Modifying Structuring Configurations (Recommended).....	461
6.8.3 Deleting a Structuring Rule.....	483
6.8.4 Querying a Structuring Rule.....	490
6.8.5 Querying the Brief List of Structuring Templates.....	498
6.8.6 Querying a Structuring Template.....	501
6.9 Container Log Ingestion from AOM to LTS.....	510
6.9.1 Creating an Ingestion Rule.....	510
6.9.2 Modifying an Ingestion Rule.....	522
6.9.3 Deleting an Ingestion Rule.....	534
6.9.4 Querying All Ingestion Rules.....	538
6.9.5 Querying an Ingestion Rule.....	547
6.10 Alarm Topics.....	555
6.10.1 Querying an SMN Topic.....	555

6.11 Message Template Management.....	558
6.11.1 Creating a Message Template.....	558
6.11.2 Modifying a Message Template.....	574
6.11.3 Querying Message Templates.....	589
6.11.4 Deleting a Message Template.....	595
6.11.5 Querying a Message Template.....	600
6.11.6 Previewing the Email Format of a Message Template.....	606
6.12 SQL Alarm Rules.....	612
6.12.1 Creating a SQL Alarm Rule.....	612
6.12.2 Modifying a SQL Alarm Rule.....	625
6.12.3 Querying SQL Alarm Rules.....	643
6.12.4 Deleting a SQL Alarm Rule.....	650
6.12.5 Switching the Alarm Rule Status.....	652
6.13 Keyword Alarm Rules.....	660
6.13.1 Creating a Keyword Alarm Rule.....	660
6.13.2 Modifying a Keyword Alarm Rule.....	673
6.13.3 Querying a Keyword Alarm Rule.....	691
6.13.4 Deleting a Keyword Alarm Rule.....	699
6.14 Alarm List.....	700
6.14.1 Querying the Active or Historical Alarm List.....	701
6.14.2 Deleting an Active Alarm.....	710
6.15 Tag Management.....	717
6.15.1 Creating a Tag.....	717
6.16 Dashboard Management.....	723
6.16.1 Creating a Dashboard Group.....	723
6.16.2 Creating a Dashboard.....	729
6.17 Log Charts.....	735
6.17.1 Querying a Log Stream Chart.....	736
6.18 Quick Search.....	739
6.18.1 Querying Historical SQL Statements.....	740
6.18.2 Adding a Quick Search.....	746
6.18.3 Obtaining a Quick Search.....	752
6.18.4 Deleting a Quick Search.....	756
6.18.5 Querying All Quick Searches in a Log Group.....	762
6.19 Multi-Account Log Aggregation.....	768
6.19.1 Obtaining the Log Aggregation Switch Status.....	768
6.19.2 Modifying the Log Aggregation Switch Status.....	770
6.19.3 Obtaining the Aggregation Settings of an Organization Member.....	773
6.19.4 Obtaining the Log Groups and Log Streams of an Organization Member.....	777
6.19.5 Updating Aggregation Configurations.....	779
<b>7 Permissions Policies and Supported Actions.....</b>	<b>786</b>
<b>8 Appendix.....</b>	<b>790</b>

---

8.1 Status Codes.....	790
8.2 Error Codes.....	791
8.3 Obtaining the Account ID, Project ID, Log Group ID, and Log Stream ID.....	793
8.4 Time Zone List for OBS Transfer.....	795

# 1 Before You Start

---

Welcome to *Log Tank Service API Reference*. LTS collects log data from hosts and cloud services. By processing massive amounts of logs efficiently, securely, and in real time, LTS provides useful insights for you to optimize the availability and performance of cloud services and applications. It also helps you efficiently perform real-time decision-making, device O&M, and service trend analysis.

This document describes how to use application programming interfaces (APIs) to perform operations on LTS, such as creating and deleting a log group, ingesting logs to LTS, and transferring logs. For details about all supported operations, see [API Overview](#).

Before calling LTS APIs, ensure that you are familiar with LTS concepts. For details, see [Service Overview](#).

LTS supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see [Calling APIs](#).

## Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. For the endpoints of all services, see [Regions and Endpoints](#).

## Concepts

- Account  
An account is created upon successful registration with the cloud system. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity, which should not be used directly to perform routine management. For security purposes, create Identity and Access Management (IAM) users and grant them permissions for routine management.
- User  
An IAM user is created using an account to use cloud services. Each IAM user has its own identity credentials (password and access keys).  
The account name, username, and password will be required for API authentication.

- Region**

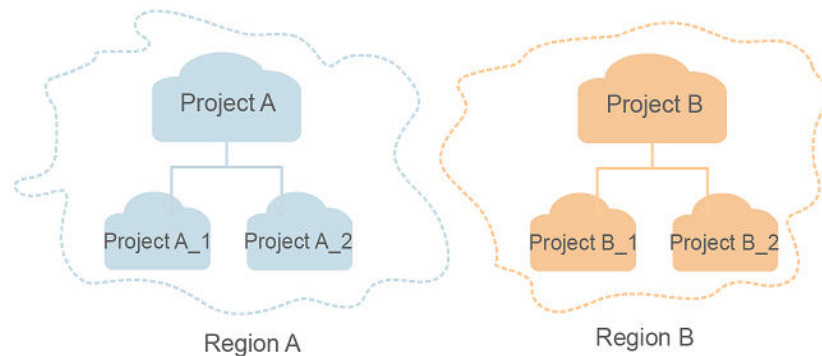
Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

For details, see [Region and AZ](#).
- AZ**

An AZ comprises one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Compute, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.
- Project**

Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create sub-projects under a project and create resources in the sub-projects. Users can then be assigned permissions to access only specific resources in the sub-projects.

**Figure 1-1** Project isolating model



- Enterprise project**

Enterprise projects group and manage resources across regions. Resources in enterprise projects are logically isolated from each other and can be directly transferred between the projects.

For details about enterprise projects and how to obtain enterprise project IDs, see [Enterprise Management User Guide](#).



# 2 API Overview

LTS extension APIs allow you to use the basic LTS functions. For example, you can query API versions, create, query, and delete log groups or log streams.

**Table 1** describes the LTS APIs.

**Table 2-1** API description

Category	Description
Host group management	APIs for creating, querying, and deleting host groups
Log group management	APIs for creating, querying, and deleting log groups
Log stream management	APIs for creating, querying, and deleting log streams
Log management	APIs for querying logs
Log ingestion	APIs for reporting logs
Log transfer	APIs for transferring logs of one or more specified log streams to other services
Log collection beyond free quota	APIs for enabling or disabling log collection beyond free quota
Cloud structuring	APIs for structuring logs, and querying, modifying, and deleting structuring rules
Container log ingestion from AOM to LTS	APIs for creating, querying, modifying, and deleting rules for ingesting container logs from AOM to LTS
SMN topics	APIs for querying SMN topics

Category	Description
Message template management	APIs for creating, modifying, deleting, and querying message templates
SQL alarms	APIs for creating, querying, modifying, and deleting SQL alarms
Keyword alarms	APIs for creating, querying, modifying, and deleting keyword alarms
Alarm list	APIs for querying and deleting alarms
Tag management	APIs for adding tags to log groups, log streams, and host groups
Dashboard management	API for creating dashboards
Log charts	APIs for querying log charts
Quick search	APIs for creating, querying, and deleting quick search requests

# 3 Calling APIs

## 3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for [creating an IAM user](#) as an example to demonstrate how to call an API.

### Request URI

A request URI is in the following format:

**{URI-scheme} :// {Endpoint} / {resource-path} ? {query-string}**

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

- **URI-scheme:** protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:** domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from [Regions and Endpoints](#).  
For example, the endpoint of IAM in the CN-Hong Kong region is **iam.ap-southeast-1.myhuaweicloud.com**.
- **resource-path:** API access path. Obtain the path from the URI of an API. For example, the **resource-path** of the API for creating an IAM user is **/v3.0/OS-USER/users**.
- **query-string:** query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of *Parameter name=Parameter value*. For example, **?limit=10** indicates that a maximum of 10 data records will be displayed.

For example, to create an IAM user, obtain the endpoint of any region (for example, the endpoint of CN-Hong Kong: iam.ap-southeast-1.myhuaweicloud.com) and **resource-path** (**/v3.0/OS-USER/users**) in the URI of the API for [creating an IAM user as an administrator](#). Then, construct the URI as follows:

```
https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

**Figure 3-1** Example URI**NOTE**

To simplify the URI display, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

## Request Methods

The HTTP protocol defines the following request methods that can be used to send a request to the server:

- **GET**: requests a server to return specified resources.
- **PUT**: requests a server to update specified resources.
- **POST**: requests a server to add resources or perform special operations.
- **DELETE**: requests a server to delete specified resources, for example, objects.
- **HEAD**: same as GET except that the server must return only the response header.
- **PATCH**: requests a server to update a part of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API used to obtain a user token, the request method is **POST**. The request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

## Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

**Table 3-1** describes common request headers.

**Table 3-1** Common request headers

Parameter	Description	Mandatory	Example Value
Host	Server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for <b>https</b> is <b>443</b> .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Type (or format) of the message body. The default value <b>application/json</b> is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Length of the request body. The unit is byte.	No	3495
X-Project-Id	Project ID. Obtain the project ID by following the instructions in <a href="#">Obtaining the Account ID, Project ID, Log Group ID, and Log Stream ID</a> .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cb aa340f9c0f4

Parameter	Description	Mandatory	Example Value
X-Auth-Token	<p>User token.</p> <p>It is a response to the API for <b>obtaining a user token</b>. This API is the only one that does not require authentication.</p> <p>After the request is processed, the value of <b>X-Subject-Token</b> in the response header is the token value.</p>	<p>No</p> <p>This field is mandatory for token authentication.</p>	<p>The following is part of an example token:</p> <p>MIIPAgYJKoZIhvcNAQc-Co...ggg1BBIINPXsidG9rZ</p>

 **NOTE**

In addition to supporting token-based authentication, APIs also support authentication using access key ID/secret access key (AK/SK). During AK/SK-based authentication, an SDK is used to sign a request, and the **Authorization** (signature information) and **X-Sdk-Date** (time when the request is sent) header fields are automatically added to the request.

For details, see "AK/SK-based Authentication" in [Authentication](#).

For the API for [creating an IAM user as an administrator](#), if AK/SK-based authentication is enabled, the request with the header is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

## Request Body (Optional)

This part is optional. A request body is often sent in a structured format (for example, JSON or XML) as defined in the **Content-Type** header field. If the request body contains full-width characters, these characters must be coded in UTF-8.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

In the case of the API used to [create an IAM user](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace the fields in bold with the actual values.

- **accountid**: ID of the account to which the IAM user belongs.
- **username**: username of the IAM user to be created.
- **email**: email address of the IAM user.
- **\*\*\*\*\***: password of the IAM user.

 NOTE

The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account. For details, see [Obtaining a User Token](#).

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****

{
  "user": {
    "domain_id": "accountid",
    "name": "username",
    "password": "*****",
    "email": "email",
    "description": "IAM User Description"
  }
}
```

By now, all data required for an API request is available. You can send the request to call the API through [curl](#), [Postman](#), or coding. In the response to the API used to obtain a user token, **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

## 3.2 Authentication

You can use either of the following authentication methods when calling APIs:

- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. AK/SK-based authentication is recommended because it is more secure than token-based authentication.
- Token-based authentication: Requests are authenticated using a token.

### AK/SK-based Authentication

 NOTE

- AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token-based authentication is recommended.
- You can use the AK/SK in a permanent or temporary access key. The **X-Security-Token** field must be configured if the AK/SK in a temporary access key is used, and the field value is **security\_token** of the temporary access key.

In AK/SK-based authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- SK: secret access key used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK-based authentication, you can use an AK/SK to sign requests based on the signature algorithm or use the signing SDK to sign requests. For details about how to sign requests and use the signing SDK, see [AK/SK Signing and Authentication Guide](#).

**NOTICE**

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

## Token-based Authentication

**NOTE**

- The validity period of a token is 24 hours. If a token is used for authentication, cache it to prevent frequent API calling.
- Ensure that the token is valid when you use it. Using a token that will soon expire may cause API calling failures.

A token is used to acquire temporary permissions. During API authentication using a token, the token is added to requests to get permissions for calling the API.

You can obtain a token by calling the [Obtaining a User Token](#) API. When you call the API, set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****#",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxx"
      }
    }
  }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

## 3.3 Response

After sending a request, you will receive a response, including a status code, response header, and response body.



## Status Code

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For details, see [Status Codes](#).

If status code 201 is returned for the API for [creating an IAM user as an administrator](#), the request is successful.

## Response Header

Similar to a request, a response also has a header, for example, **Content-type**.

For the API for [creating an IAM user as an administrator](#), the message header shown in [Figure 3-2](#) is returned.

**Figure 3-2** Response header

```
"X-Frame-Options": "SAMEORIGIN",
"X-IAM-ETag-id": "2562365939-d8f6f12921974cb097338ac11fceac8a",
"Transfer-Encoding": "chunked",
"Strict-Transport-Security": "max-age=31536000; includeSubdomains;",
"Server": "api-gateway",
"X-Request-Id": "af2953f2bcc67a42325a69a19e6c32a2",
"X-Content-Type-Options": "nosniff",
"Connection": "keep-alive",
"X-Download-Options": "noopen",
"X-XSS-Protection": "1; mode=block;",
"X-IAM-Trace-Id": "token_ null_af2953f2bcc67a42325a69a19e6c32a2",
"Date": "Tue, 21 May 2024 09:03:40 GMT",
"Content-Type": "application/json; charset=utf8"
```

## Response Body (Optional)

The body of a response is often returned in structured format as specified in the **Content-type** header field. The response body transfers content except the response header.

For the API for [creating an IAM user as an administrator](#), the following message body is returned. The following is part of the response body:

```
{
  "user": {
    "id": "c131886aec...",
    "name": "IAMUser",
    "description": "IAM User Description",
    "areacode": "",
    "phone": "",
    "email": "****@***.com",
    "status": null,
    "enabled": true,
    "pwd_status": false,
    "access_mode": "default",
    "is_domain_owner": false,
    "xuser_id": "",
    "xuser_type": "",
    "password_expires_at": null,
    "create_time": "2024-05-21T09:03:41.000000",
    "domain_id": "d78cbac1.....",
    "xdomain_id": "30086000.....",
```

```
"xdomain_type": "",  
"default_project_id": null  
}
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{  
  "error_msg": "Request body is invalid.",  
  "error_code": "IAM.0011"  
}
```

In the response body, **error\_code** is an error code, and **error\_msg** provides information about the error.

# 4 API Calling Examples

This section describes how to create a log group by calling APIs.

## NOTE

The token obtained from Identity and Access Management (IAM) is valid for only 24 hours. If you want to use the same token for authentication, cache it to avoid frequent calling of the IAM API.

## Involved APIs

If you use a token for authentication, you must obtain the token and add **X-Auth-Token** to the request header when making an API call.

- IAM API used to obtain the token
- LTS API used to create a log group

## Procedure

1. Obtain the token by referring to [Making an API Request](#).
2. Send **POST /v2/{project\_id}/groups**.
3. Add **Content-Type** and **X-Auth-Token** to the request header.
4. Specify the following parameters in the request body:

```
POST /v2/{project_id}/groups
{
  "log_group_name":"test001", //Log group name (The parameter is mandatory and its value is a
  string.)
  "ttl_in_days":"7", //Log expiration time (The value is an integer. Retain the default value.)
}
```

If the request is successful, information about the created log group is returned.

```
{
  "log_group_id":"2a0089e4-3001-11e9-9e9d-286ed48xxx", //Log group ID (The value is a string.)
}
```

If the request fails, an error code and error description are returned. For details, see [Error Codes](#).

# 5 Examples

---

## 5.1 Example 1: Creating a Log Group

### Scenario

This section describes how to create a log group in LTS.

### Other Involved APIs

None

### Creating a Log Group

- URI format

POST /v2/{project\_id}/groups

- Example Request

POST https://{endpoint}/v2/{project\_id}/groups

Obtain the value of *{endpoint}* from [Endpoints](#).

Body:

```
{
  "log_group_name": "lts-group-01nh",
  "ttl_in_days": 7
}
```

- Example Response

```
{
  "log_group_id" : "string"
}
```

## 5.2 Example 2: Querying All Log Groups of an Account

### Scenario

This section describes how to query all log groups of an account.

## Other Involved APIs

None

## Querying Log Groups

- URI format

GET /v2/{project\_id}/groups

- Example Request

GET https://{endpoint}/v2/{project\_id}/groups

Obtain the value of *{endpoint}* from [Endpoints](#).

- Example Response

```
{"log_groups" : [{"creation_time" : number,"log_group_name" : "string","log_group_id" :  
"string","ttl_in_days" : 1}]}
```

## 5.3 Example 3: Creating a Log Stream

### Scenario

This section describes how to create a log stream in a specified log group.

## Other Involved APIs

None

## Creating a Log Stream

- URI format

POST /v2/{project\_id}/groups/{log\_group\_id}/streams

- Example Request

POST https://{endpoint}/v2/{project\_id}/groups/{log\_group\_id}/streams

Obtain the value of *{endpoint}* from [Endpoints](#).

Body:

```
{  
  "log_stream_name": "lts-stream-02kh"  
}
```

- Example Response

```
{  
  "log_stream_id" : "string"  
}
```

## 5.4 Example 4: Querying All Log Streams in a Log Group

### Scenario

This section describes how to query information about all log streams in a specified log group.

### Other Involved APIs

None

### Querying Log Streams

- URI format

GET /v2/{project\_id}/groups/{log\_group\_id}/streams

- Example Request

GET https://{endpoint}/v2/{project\_id}/groups/{log\_group\_id}/streams

Obtain the value of *{endpoint}* from [Endpoints](#).

- Example Response

```
{
  "log_streams" : [ {
    "creation_time" : number,
    "log_stream_name" : "string",
    "log_stream_id" : "string",
    "filter_count" : number
  } ]
}
```

## 5.5 Example 5: Transferring Logs to OBS

### Scenario

This section describes how to transfer logs of one or more log streams to OBS.

### Other Involved APIs

Call the following API to obtain the name of the OBS bucket to which logs will be transferred:

[Listing Buckets](#)

### Transferring Logs to OBS

- URI format

POST /v2/{project\_id}/log-dump/obs

- Example Request

POST `https://{endpoint}/v2/{project_id}/log-dump/obs`

Obtain the value of `{endpoint}` from [Endpoints](#).

Body:

```
{
  "log_group_id": "d9dba9f3-xxxx-48bd-xxxx-xxxxa24a8053",
  "log_stream_ids": ["45e7f609-xxxx-4cd3-835b-xxxx4a124718"],
  "obs_bucket_name": "lts-test",
  "type": "cycle",
  "storage_format": "RAW",
  "switch_on": "true",
  "prefix_name": "fileprefixname",
  "dir_prefix_name": "dirprefixname",
  "period": 5,
  "period_unit": "min"
}
```

- Example Response

```
{
  "log_dump_obs_id" : "45fdc36b-xxxx-4567-xxxx-559xxxxdf968"
}
```

# 6 APIs

All API URIs described in this chapter are case-sensitive.

## 6.1 Host Group Management

### 6.1.1 Querying Host Information

#### Function

Query the host list.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

POST /v3/{project\_id}/lts/host-list

**Table 6-1** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>1</b> Maximum: <b>64</b>



## Request Parameters

**Table 6-2** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=utf8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-3** Request body parameters

Parameter	Mandatory	Type	Description
host_id_list	No	Array of strings	Host ID list. You can filter hosts by host ID. Minimum: <b>36</b> Maximum: <b>36</b>
filter	Yes	<a href="#">GetHostListFilter</a> object	Filters other than host IDs.

**Table 6-4** GetHostListFilter

Parameter	Mandatory	Type	Description
host_name_list	No	Array of strings	Host name list. You can filter hosts by host name. Minimum: <b>1</b> Maximum: <b>128</b>
host_ip_list	No	Array of strings	List of host IP addresses. You can filter hosts by host IP address. Minimum: <b>1</b> Maximum: <b>16</b>

Parameter	Mandatory	Type	Description
host_status	No	String	<p>Host status. You can filter hosts by host status.</p> <p><b>uninstall:</b> Not installed.</p> <p><b>running:</b> Running.</p> <p><b>offline:</b> Offline.</p> <p><b>error:</b> Abnormal.</p> <p><b>plugin error:</b> Plug-in error.</p> <p><b>installing:</b> Being installed.</p> <p><b>install-fail:</b> Installation fails.</p> <p><b>upgrading:</b> Upgrade in progress.</p> <p><b>upgrading-transient:</b> Upgrade in progress.</p> <p><b>upgrade failed:</b> Upgrade fails.</p> <p><b>upgrade-fail:</b> Upgrade fails.</p> <p><b>uninstalling:</b> Being uninstalled.</p> <p><b>uninstalling-transient:</b> Being uninstalled.</p> <p><b>authentication error:</b> Authentication fails.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>uninstall</b></li> <li>• <b>running</b></li> <li>• <b>offline</b></li> <li>• <b>error</b></li> <li>• <b>plugin error</b></li> <li>• <b>installing</b></li> <li>• <b>install-fail</b></li> <li>• <b>upgrading</b></li> <li>• <b>upgrading-transient</b></li> <li>• <b>upgrade failed</b></li> <li>• <b>upgrade-fail</b></li> <li>• <b>uninstalling</b></li> <li>• <b>uninstalling-transient</b></li> <li>• <b>authentication error</b></li> </ul>
host_version	No	String	<p>Host version. You can filter hosts by host version.</p> <p>Minimum: <b>1</b></p> <p>Maximum: <b>16</b></p>

## Response Parameters

Status code: 200

**Table 6-5** Response body parameters

Parameter	Type	Description
result	Array of <a href="#">GetHostListInfo</a> objects	Host list.
total	Long	Total number of hosts. Minimum: <b>0</b> Maximum: <b>10000</b>

**Table 6-6** GetHostListInfo

Parameter	Type	Description
host_id	String	Host ID. Minimum: <b>36</b> Maximum: <b>36</b>
host_ip	String	Host IP. Minimum: <b>1</b> Maximum: <b>16</b>
host_name	String	Host name. Minimum: <b>1</b> Maximum: <b>128</b>

Parameter	Type	Description
host_status	String	<p>Host status.</p> <p><b>uninstall:</b> Not installed.</p> <p><b>running:</b> Running.</p> <p><b>offline:</b> Offline.</p> <p><b>error:</b> Abnormal.</p> <p><b>plugin error:</b> Plug-in error.</p> <p><b>installing:</b> Being installed.</p> <p><b>install-fail:</b> Installation fails.</p> <p><b>upgrading:</b> Upgrade in progress.</p> <p><b>upgrading-transient:</b> Upgrade in progress.</p> <p><b>upgrade failed:</b> Upgrade fails.</p> <p><b>upgrade-fail:</b> Upgrade fails.</p> <p><b>uninstalling:</b> Being uninstalled.</p> <p><b>uninstalling-transient:</b> Being uninstalled.</p> <p><b>authentication error:</b> Authentication fails.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>uninstall</b></li> <li>• <b>running</b></li> <li>• <b>offline</b></li> <li>• <b>error</b></li> <li>• <b>plugin error</b></li> <li>• <b>installing</b></li> <li>• <b>install-fail</b></li> <li>• <b>upgrading</b></li> <li>• <b>upgrading-transient</b></li> <li>• <b>upgrade failed</b></li> <li>• <b>upgrade-fail</b></li> <li>• <b>uninstalling</b></li> <li>• <b>uninstalling-transient</b></li> <li>• <b>authentication error</b></li> </ul>
host_type	String	<p>Host type. <b>linux</b> and <b>windows</b>.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>linux</b></li> <li>• <b>windows</b></li> </ul>

Parameter	Type	Description
host_version	String	Host version. Minimum: <b>1</b> Maximum: <b>16</b>
update_time	Long	Update time. Minimum: <b>13</b> Maximum: <b>13</b>

**Status code: 400**

**Table 6-7** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**

**Table 6-8** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

Hosts are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
POST https://{endpoint}/v3/{project_id}/lts/host-list
{
```

```
"host_id_list" : [ "713a9f81-574b-45aa-92df-24c4caxxxxxx", "c7085aa9-2142-4ada-9f78-bf81ffxxxxx" ],
"filter" : {
  "host_name_list" : [ "ecs-xxxx", "10.66.16xxx" ],
  "host_ip_list" : [ "192.168xxxx" ],
  "host_status" : "ruxxxx",
  "host_version" : "5.13.xxxx"
}
```

## Example Responses

### Status code: 200

The host query is successful.

```
{
  "result" : [ {
    "host_id" : "dc1dab7e-b045-4e77-bda4-914xxxxxx",
    "host_ip" : "172.16.xxxx",
    "host_name" : "ecs-apmtxxxxxx",
    "host_status" : "xxxxxx",
    "host_type" : "xxxxx",
    "host_version" : "5.13.xx.x",
    "update_time" : 1637223314526
  } ],
  "total" : 1
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.1807",
  "error_msg" : "Invalid host id"
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "Internal Server Error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Hosts are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
```

```
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListHostSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();

        ListHostRequest request = new ListHostRequest();
        GetHostListRequestBody body = new GetHostListRequestBody();
        List<String> listFilterHostIpList = new ArrayList<>();
        listFilterHostIpList.add("192.168xxxx");
        List<String> listFilterHostNameList = new ArrayList<>();
        listFilterHostNameList.add("ecs-xxxx");
        listFilterHostNameList.add("10.66.16xxx");
        GetHostListFilter filterbody = new GetHostListFilter();
        filterbody.withHostNameList(listFilterHostNameList)
            .withHostIpList(listFilterHostIpList)
            .withHostStatus(GetHostListFilter.HostStatusEnum.fromValue("ruxxxx"))
            .withHostVersion("5.13.xxxx");
        List<String> listbodyHostIdList = new ArrayList<>();
        listbodyHostIdList.add("713a9f81-574b-45aa-92df-24c4caxxxxxx");
        listbodyHostIdList.add("c7085aa9-2142-4ada-9f78-bf81ffxxxxxx");
        body.withFilter(filterbody);
        body.withHostIdList(listbodyHostIdList);
        request.withBody(body);
        try {
            ListHostResponse response = client.listHost(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

Hosts are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
# coding: utf-8

import os
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListHostRequest()
        listHostIpListFilter = [
            "192.168xxxx"
        ]
        listHostNameListFilter = [
            "ecs-xxxx",
            "10.66.16xxx"
        ]
        filterbody = GetHostListFilter(
            host_name_list=listHostNameListFilter,
            host_ip_list=listHostIpListFilter,
            host_status="ruxxxx",
            host_version="5.13.xxxx"
        )
        listHostIdListbody = [
            "713a9f81-574b-45aa-92df-24c4caxxxxxx",
            "c7085aa9-2142-4ada-9f78-bf81ffxxxxxx"
        ]
        request.body = GetHostListRequestBody(
            filter=filterbody,
            host_id_list=listHostIdListbody
        )
        response = client.list_host(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Hosts are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
```



```

// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListHostRequest{}
var listHostIpListFilter = []string{
    "192.168xxxx",
}
var listHostNameListFilter = []string{
    "ecs-xxxx",
    "10.66.16xxx",
}
hostStatusFilter:= model.GetHostListFilterHostStatusEnum().RUXXXX
hostVersionFilter:= "5.13.xxxx"
filterbody := &model.GetHostListFilter{
    HostNameList: &listHostNameListFilter,
    HostIpList: &listHostIpListFilter,
    HostStatus: &hostStatusFilter,
    HostVersion: &hostVersionFilter,
}
var listHostIdListbody = []string{
    "713a9f81-574b-45aa-92df-24c4caxxxxxx",
    "c7085aa9-2142-4ada-9f78-bf81ffxxxxxx",
}
request.Body = &model.GetHostListRequestBody{
    Filter: filterbody,
    HostIdList: &listHostIdListbody,
}
response, err := client.ListHost(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The host query is successful.

Status Code	Description
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.1.2 Querying Host Groups

### Function

Query the host group list.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v3/{project\_id}/lts/host-group-list

**Table 6-9** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 1 Maximum: 64

## Request Parameters

**Table 6-10** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-11** Request body parameters

Parameter	Mandatory	Type	Description
host_group_id_list	No	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>
filter	Yes	<a href="#">GetHostGroupListFilter</a> object	Host group filters.

**Table 6-12** GetHostGroupListFilter

Parameter	Mandatory	Type	Description
host_group_type	No	String	Host group type. <b>windows</b> and <b>linux</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>windows</b></li> <li>• <b>linux</b></li> </ul>
host_group_name_list	No	Array of strings	List of host group names. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
host_name_list	No	Array of strings	Host name list. Minimum: <b>1</b> Maximum: <b>128</b>
host_group_tag	No	<a href="#">GetHostGroupListTag</a> object	Host group tags.

**Table 6-13** GetHostGroupListTag

Parameter	Mandatory	Type	Description
tag_type	No	String	Tag type. Tag filtering logic: <b>AND</b> or <b>OR</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>AND</b></li> <li>• <b>OR</b></li> </ul>
tag_list	No	Array of <a href="#">HostGroupTag</a> objects	Host group tags.

**Table 6-14** HostGroupTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	No	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

## Response Parameters

Status code: 200

**Table 6-15** Response body parameters

Parameter	Type	Description
result	Array of <a href="#">GetHostGroupInfo</a> objects	Host group list.
total	Long	Total number of host groups. Minimum: <b>0</b> Maximum: <b>1000</b>

**Table 6-16** GetHostGroupInfo

Parameter	Type	Description
host_group_id	String	Host group ID. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_name	String	Host group name. Minimum: <b>1</b> Maximum: <b>64</b>
host_group_type	String	Host group type. Linux and Windows. Enumeration values: <ul style="list-style-type: none"> <li>• <b>linux</b></li> <li>• <b>windows</b></li> </ul>
host_id_list	Array of strings	Host ID list. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_tag	Array of <a href="#">HostGroupTagResponseBody</a> objects	Tag information.
create_time	Long	Creation time. Minimum: <b>0</b> Maximum: <b>9999999999999</b>
update_time	Long	Update time. Minimum: <b>0</b> Maximum: <b>9999999999999</b>

**Table 6-17** HostGroupTagResBody

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>36</b>
value	String	Tag value. Minimum: <b>1</b> Maximum: <b>36</b>

**Status code: 400**

**Table 6-18** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description. Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**

**Table 6-19** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description. Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

Host groups are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
POST https://{endpoint}/v3/{project_id}/lts/host-group-list
```

```
{
  "host_group_id_list": [ "bca6d903-3528-42a8-91f4-586722cxxxxx" ],
  "filter": {
    "host_group_type": "lixxx",
    "host_group_name_list": [ "wjyTxxx", "xxxest" ],
    "host_name_list": [ "ecs-apmtexxxdeletion" ],
    "host_group_tag": {
      "tag_type": "AND",
      "tag_list": [ {
        "key": "xxx",
        "value": "xxx"
      } ]
    }
  }
}
```

## Example Responses

### Status code: 200

The host group query is successful.

```
{
  "result": [ {
    "host_group_id": "598c77aa-c69b-42f0-8cb8-xxxx5b38",
    "host_group_name": "devspoxxxou1",
    "host_group_type": "lxxux",
    "host_id_list": [ "dc1dab7e-b04xxxx", "xxxxx" ],
    "host_group_tag": [ {
      "key": "xxx",
      "value": "xxx"
    }, {
      "key": "xxx",
      "value": "xxx"
    } ],
    "create_time": 1635459410332,
    "update_time": 163560332
  } ],
  "total": 1
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.1807",
  "error_msg": "Invalid host group id"
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0010",
  "error_msg": "Internal Server Error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

Host groups are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListHostGroupSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();

        ListHostGroupRequest request = new ListHostGroupRequest();
        GetHostGroupListRequestBody body = new GetHostGroupListRequestBody();
        List<HostGroupTag> listHostGroupTagTagList = new ArrayList<>();
        listHostGroupTagTagList.add(
            new HostGroupTag()
                .withKey("xxx")
                .withValue("xxx")
        );
        GetHostGroupListTag hostGroupTagFilter = new GetHostGroupListTag();
        hostGroupTagFilter.withTagType(GetHostGroupListTag.TagTypeEnum.fromValue("AND"))
            .withTagList(listHostGroupTagTagList);
        List<String> listFilterHostNameList = new ArrayList<>();
        listFilterHostNameList.add("ecs-apmtexxxdeletion");
        List<String> listFilterHostGroupNameList = new ArrayList<>();
        listFilterHostGroupNameList.add("wjyTxxx");
        listFilterHostGroupNameList.add("xxxest");
        GetHostGroupListFilter filterbody = new GetHostGroupListFilter();
        filterbody.withHostGroupType(GetHostGroupListFilter.HostGroupTypeEnum.fromValue("lixxx"))
            .withHostGroupNameList(listFilterHostGroupNameList)
            .withHostNameList(listFilterHostNameList)
            .withHostGroupTag(hostGroupTagFilter);
        List<String> listbodyHostGroupIdList = new ArrayList<>();
        listbodyHostGroupIdList.add("bca6d903-3528-42a8-91f4-586722cxxxxx");
        body.withFilter(filterbody);
        body.withHostGroupIdList(listbodyHostGroupIdList);
        request.withBody(body);
        try {
            ListHostGroupResponse response = client.listHostGroup(request);
            System.out.println(response.toString());
        }
    }
}
```



```
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Host groups are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *
```

```
if __name__ == "__main__":
```

```
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
```

```
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"
```

```
    credentials = BasicCredentials(ak, sk, projectId)
```

```
    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
    try:
```

```
        request = ListHostGroupRequest()
```

```
        listTagListHostGroupTag = [
```

```
            HostGroupTag(
                key="xxx",
                value="xxx"
            )
```

```
        ]
        hostGroupTagFilter = GetHostGroupListTag(
            tag_type="AND",
            tag_list=listTagListHostGroupTag
        )
```

```
        listHostNameListFilter = [
            "ecs-apmtexxdeletion"
```

```
        ]
        listHostGroupNameListFilter = [
            "wjyTxxx",
            "xxxest"
```

```
        ]
        filterbody = GetHostGroupListFilter(
            host_group_type="lixxx",
            host_group_name_list=listHostGroupNameListFilter,
            host_name_list=listHostNameListFilter,
            host_group_tag=hostGroupTagFilter
        )
```

```
listHostGroupIdListbody = [
    "bca6d903-3528-42a8-91f4-586722cxxxx"
]
request.body = GetHostGroupListRequestBody(
    filter=filterbody,
    host_group_id_list=listHostGroupIdListbody
)
response = client.list_host_group(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

Host groups are sorted by filters specified in the request body. If no filters are configured in the body, all host groups are queried.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListHostGroupRequest{}
    keyTagList := "xxx"
    valueTagList := "xxx"
    var listTagListHostGroupTag = []model.HostGroupTag{
        {
            Key: &keyTagList,
            Value: &valueTagList,
        },
    }
    tagTypeHostGroupTag := model.GetGetHostGroupListTagTypeEnum().AND
    hostGroupTagFilter := &model.GetHostGroupListTag{
        TagType: &tagTypeHostGroupTag,
        TagList: &listTagListHostGroupTag,
    }
    var listHostNameListFilter = []string{
        "ecs-apmtexxdeletion",
    }
}
```

```
var listHostGroupNameListFilter = []string{
    "wjyTxxx",
    "xxxest",
}
hostGroupTypeFilter:= model.GetGetHostGroupListFilterHostGroupTypeEnum().LIXXX
filterbody := &model.GetHostGroupListFilter{
    HostGroupType: &hostGroupTypeFilter,
    HostGroupNameList: &listHostGroupNameListFilter,
    HostNameList: &listHostNameListFilter,
    HostGroupTag: hostGroupTagFilter,
}
var listHostGroupIdListbody = []string{
    "bca6d903-3528-42a8-91f4-586722cxxxxx",
}
request.Body = &model.GetHostGroupListRequestBody{
    Filter: filterbody,
    HostGroupIdList: &listHostGroupIdListbody,
}
response, err := client.ListHostGroup(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The host group query is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.1.3 Creating a Host Group

### Function

Create a host group.

### Calling Method

For details, see [Calling APIs](#).

## URI

POST /v3/{project\_id}/lts/host-group

**Table 6-20** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>1</b> Maximum: <b>64</b>

## Request Parameters

**Table 6-21** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-22** Request body parameters

Parameter	Mandatory	Type	Description
host_group_name	Yes	String	Host group name. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
host_group_type	Yes	String	Host group type. Windows and Linux. Enumeration values: <ul style="list-style-type: none"> <li>• <b>linux</b></li> <li>• <b>windows</b></li> </ul>
host_id_list	No	Array of strings	List of host group IDs. The host type must be the same as the host group type. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_tag	No	Array of <b>HostGroupTag</b> objects	Tag information. You can add up to 20 tags. The tag key must be unique.

**Table 6-23** HostGroupTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	No	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

## Response Parameters

**Status code: 200**

**Table 6-24** Response body parameters

Parameter	Type	Description
host_group_id	String	Host group ID. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_name	String	Host group name. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Type	Description
host_group_type	String	Host group type. Linux and Windows. Enumeration values: <ul style="list-style-type: none"> <li>• <b>linux</b></li> <li>• <b>windows</b></li> </ul>
host_id_list	Array of strings	Host ID list. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_tag	Array of <b>HostGroupTagResBody</b> objects	Tag information.
create_time	Long	Creation time. Minimum: <b>0</b> Maximum: <b>999999999999999</b>
update_time	Long	Update time. Minimum: <b>0</b> Maximum: <b>999999999999999</b>

**Table 6-25** HostGroupTagResBody

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>36</b>
value	String	Tag value. Minimum: <b>1</b> Maximum: <b>36</b>

**Status code: 400**

**Table 6-26** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>

Parameter	Type	Description
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**

**Table 6-27** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

Create a host group. Parameters `host_group_name` and `host_group_type` are mandatory.

```
POST https://{endpoint}/v3/{project_id}/lts/host-group
{
  "host_group_name": "APIxx3",
  "host_group_type": "linxx",
  "host_id_list": [ "dc1dab7e-b045-4e77xxd1bf7", "713a9fxx2df-24c4ca599def" ],
  "host_group_tag": [ {
    "key": "xxx",
    "value": "xxx"
  }, {
    "key": "xxx1",
    "value": "xxx"
  } ]
}
```

## Example Responses

**Status code: 200**

The host group is created.

```
{
  "host_group_id": "598c77aa-c69b-42f0-8cb8-983178ad5b38",
  "host_group_name": "devspore_app_dzhou1",
  "host_group_type": "linux",
  "host_id_list": [ "dc1dab7e-b045-4e77-bda4-914d083d1bf7", "xxxx" ],
  "host_group_tag": [ {
    "key": "xxx",
    "value": "xxx"
  } ]
}
```

```
    } ],  
    "create_time" : 1635149410332,  
    "update_time" : 1635149410332  
  }  
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{  
  "error_code" : "LTS.1807",  
  "error_msg" : "Invalid host group id"  
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{  
  "error_code" : "LTS.0010",  
  "error_msg" : "Internal Server Error"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Create a host group. Parameters `host_group_name` and `host_group_type` are mandatory.

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CreateHostGroupSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        LtsClient client = LtsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
```



```
        .build();
        CreateHostGroupRequest request = new CreateHostGroupRequest();
        CreateHostGroupRequestBody body = new CreateHostGroupRequestBody();
        List<HostGroupTag> listbodyHostGroupTag = new ArrayList<>();
        listbodyHostGroupTag.add(
            new HostGroupTag()
                .withKey("xxx")
                .withValue("xxx")
        );
        listbodyHostGroupTag.add(
            new HostGroupTag()
                .withKey("xxx1")
                .withValue("xxx")
        );
        List<String> listbodyHostIdList = new ArrayList<>();
        listbodyHostIdList.add("dc1dab7e-b045-4e77xxd1bf7");
        listbodyHostIdList.add("713a9fxx2df-24c4ca599def");
        body.withHostGroupTag(listbodyHostGroupTag);
        body.withHostIdList(listbodyHostIdList);
        body.withHostGroupType(CreateHostGroupRequestBody.HostGroupTypeEnum.fromValue("linxx"));
        body.withHostGroupName("APIxx3");
        request.withBody(body);
        try {
            CreateHostGroupResponse response = client.createHostGroup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

Create a host group. Parameters `host_group_name` and `host_group_type` are mandatory.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
try:
    request = CreateHostGroupRequest()
    listHostGroupTagbody = [
        HostGroupTag(
            key="xxx",
            value="xxx"
        ),
        HostGroupTag(
            key="xxx1",
            value="xxx"
        )
    ]
    listHostIdListbody = [
        "dc1dab7e-b045-4e77xd1bf7",
        "713a9fxx2df-24c4ca599def"
    ]
    request.body = CreateHostGroupRequestBody(
        host_group_tag=listHostGroupTagbody,
        host_id_list=listHostIdListbody,
        host_group_type="linxx",
        host_group_name="APIxx3"
    )
    response = client.create_host_group(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

Create a host group. Parameters `host_group_name` and `host_group_type` are mandatory.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateHostGroupRequest{
        keyHostGroupTag:= "xxx"
```

```

valueHostGroupTag:= "xxx"
keyHostGroupTag1:= "xxx1"
valueHostGroupTag1:= "xxx"
var listHostGroupTagbody = []model.HostGroupTag{
    {
        Key: &keyHostGroupTag,
        Value: &valueHostGroupTag,
    },
    {
        Key: &keyHostGroupTag1,
        Value: &valueHostGroupTag1,
    },
}
var listHostIdListbody = []string{
    "dc1dab7e-b045-4e77xxd1bf7",
    "713a9fxx2df-24c4ca599def",
}
request.Body = &model.CreateHostGroupRequestBody{
    HostGroupTag: &listHostGroupTagbody,
    HostIdList: &listHostIdListbody,
    HostGroupType: model.GetCreateHostGroupRequestBodyHostGroupTypeEnum().LINXX,
    HostGroupName: "APIxx3",
}
response, err := client.CreateHostGroup(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The host group is created.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.1.4 Deleting a Host Group

### Function

Delete a host group.

## Calling Method

For details, see [Calling APIs](#).

## URI

DELETE /v3/{project\_id}/lts/host-group

**Table 6-28** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>1</b> Maximum: <b>64</b>

## Request Parameters

**Table 6-29** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-30** Request body parameters

Parameter	Mandatory	Type	Description
host_group_id_list	Yes	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>

## Response Parameters

Status code: 200

**Table 6-31** Response body parameters

Parameter	Type	Description
result	Array of <a href="#">GetHostGroupInfo</a> objects	Host group details.
total	Long	Number of deleted host groups. Minimum: <b>0</b> Maximum: <b>1000</b>

**Table 6-32** GetHostGroupInfo

Parameter	Type	Description
host_group_id	String	Host group ID. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_name	String	Host group name. Minimum: <b>1</b> Maximum: <b>64</b>
host_group_type	String	Host group type. Linux and Windows. Enumeration values: <ul style="list-style-type: none"> <li>• <b>linux</b></li> <li>• <b>windows</b></li> </ul>
host_id_list	Array of strings	Host ID list. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_tag	Array of <a href="#">HostGroupTagResponseBody</a> objects	Tag information.
create_time	Long	Creation time. Minimum: <b>0</b> Maximum: <b>9999999999999</b>
update_time	Long	Update time. Minimum: <b>0</b> Maximum: <b>9999999999999</b>

**Table 6-33** HostGroupTagResBody

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>36</b>
value	String	Tag value. Minimum: <b>1</b> Maximum: <b>36</b>

**Status code: 400****Table 6-34** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500****Table 6-35** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

Delete one or multiple host groups at a time.

```
DELETE https://{endpoint}/v3/{project_id}/lts/host-group
```

```
/v3/{project_id}/lts/host-group  
{  
  "host_group_id_list":["xxxx","xxxx"]  
}
```

## Example Responses

### Status code: 200

Host groups are deleted.

```
{  
  "result" : [{  
    "host_group_id" : "598c77aa-c69b-42f0-8cb8-xxxx5b38",  
    "host_group_name" : "devspoxxxou1",  
    "host_group_type" : "lxxux",  
    "host_id_list" : ["dc1dab7e-b04xxxx", "xxxxx"],  
    "host_group_tag" : [{  
      "key" : "xxx",  
      "value" : "xxx"  
    }, {  
      "key" : "xxx",  
      "value" : "xxx"  
    }  
  ],  
    "create_time" : 1635xx9410332,  
    "update_time" : 163xx0332  
  }  
],  
  "total" : 1  
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{  
  "error_code" : "LTS.1807",  
  "error_msg" : "Invalid host group id"  
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{  
  "error_code" : "LTS.0010",  
  "error_msg" : "Internal Server Error"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Delete one or multiple host groups at a time.

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;
```

```
import com.huaweicloud.sdk.lts.v2.model.*;

public class DeleteHostGroupSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteHostGroupRequest request = new DeleteHostGroupRequest();
        try {
            DeleteHostGroupResponse response = client.deleteHostGroup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

Delete one or multiple host groups at a time.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
```



```
.build()

try:
    request = DeleteHostGroupRequest()
    response = client.delete_host_group(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

Delete one or multiple host groups at a time.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteHostGroupRequest{}
    response, err := client.DeleteHostGroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Host groups are deleted.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.1.5 Modifying a Host Group

### Function

Modify a host group.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v3/{project\_id}/lts/host-group

**Table 6-36** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 1 Maximum: 64

## Request Parameters

**Table 6-37** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-38** Request body parameters

Parameter	Mandatory	Type	Description
host_group_id	Yes	String	Host group ID. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_name	No	String	Host group name. This parameter cannot be passed if the host group name is not changed. Minimum: <b>1</b> Maximum: <b>64</b>
host_id_list	No	Array of strings	Host ID list. The host type must be the same as the host group type. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_tag	No	Array of <a href="#">HostGroupTag</a> objects	Host group tags. The tag key must be unique.

**Table 6-39** HostGroupTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	No	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

## Response Parameters

Status code: **200**

**Table 6-40** Response body parameters

Parameter	Type	Description
host_group_id	String	Host group ID. Minimum: <b>36</b> Maximum: <b>36</b>
host_group_name	String	Host group name. Minimum: <b>1</b> Maximum: <b>64</b>
host_group_type	String	Host group type. Linux and Windows. Enumeration values: <ul style="list-style-type: none"><li>• <b>linux</b></li><li>• <b>windows</b></li></ul>
host_id_list	Array of strings	Host ID list.
host_group_tag	Array of <b>HostGroupTag</b> objects	Tag information. You can add up to 20 tags.
create_time	Long	Creation time. Minimum: <b>0</b> Maximum: <b>9999999999999</b>
update_time	Long	Update time. Minimum: <b>0</b> Maximum: <b>9999999999999</b>

**Table 6-41** HostGroupTag

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

**Status code: 400**

**Table 6-42** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**

**Table 6-43** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

Update a host group. Parameter `host_group_id` is mandatory.

```
PUT https://{endpoint}/v3/{project_id}/lts/host-group
```

```
{
  "host_group_id": "xxxxxx",
  "host_group_name": "qweqwe",
  "host_id_list": [ "host_id_1", "host_id_2" ],
  "host_group_tag": [ {
    "key": "xxx",
    "value": "xxx"
  } ]
}
```

## Example Responses

### Status code: 200

The host group is modified.

```
{
  "host_group_id": "598c77aa-c69b-42f0-8cb8-983178b38",
  "host_group_name": "devspore_app_dzhou1",
  "host_group_type": "linux",
  "host_id_list": [ "dc1dab7e-b045-4e77-bda4-914d3f7", "xxxxx" ],
  "host_group_tag": [ {
    "key": "xxx",
    "value": "xxx"
  }, {
    "key": "xxx",
    "value": "xxx"
  } ],
  "create_time": 16351494332,
  "update_time": 16351494332
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.1807",
  "error_msg": "Invalid host group id"
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0010",
  "error_msg": "Internal Server Error"
}
```

## Status Codes

Status Code	Description
200	The host group is modified.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.2 Log Group Management

## 6.2.1 Creating a Log Group

### Function

This API is used to create a log group.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/groups

**Table 6-44** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-45** Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID.

## Request Parameters

**Table 6-46** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-47** Request body parameters

Parameter	Mandatory	Type	Description
log_group_name	Yes	String	Name of the log group to be created. The configuration rules are as follows: Must be a string of 1 to 64 characters. Only allows uppercase and lowercase letters, digits, underscores (_), hyphens (-), and periods (.). The name cannot start with a period or underscore, or end with a period. Minimum: <b>1</b> Maximum: <b>64</b>
ttl_in_days	Yes	Integer	Log retention duration. (Default: 30 days) Minimum: <b>1</b> Maximum: <b>365</b>
tags	No	Array of <a href="#">tagsBody</a> objects	Tag field information.



Parameter	Mandatory	Type	Description
log_group_name_alias	No	String	Log group alias.

**Table 6-48** tagsBody

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
value	No	String	Tag value.

## Response Parameters

**Status code: 201**

**Table 6-49** Response body parameters

Parameter	Type	Description
log_group_id	String	ID of the created log group. Minimum: <b>36</b> Maximum: <b>36</b>

**Status code: 400**

**Table 6-50** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>

**Status code: 401**

**Table 6-51** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 403**

**Table 6-52** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-53** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 503**

**Table 6-54** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>

## Example Requests

Creating a log group

```
POST https://{endpoint}/v2/{project_id}/groups
{
  "log_group_name": "lts-group-01nh",
  "ttl_in_days": 7
}
```

## Example Responses

### Status code: 201

The request is successful and the log group has been created.

```
{
  "log_group_id": "b6b9332b-091f-4b22-b810-264318d2d664"
}
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.0009",
  "error_msg": "Failed to validate the request body"
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code": "LTS.0003",
  "error_msg": "Invalid token"
}
```

### Status code: 403

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code": "LTS.0001",
```

```
"error_msg" : "Invalid projectId"  
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{  
  "error_code" : "LTS.0102",  
  "error_msg" : "Failed to create log group"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a log group

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
public class CreateLogGroupSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        LtsClient client = LtsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        CreateLogGroupRequest request = new CreateLogGroupRequest();  
        CreateLogGroupParams body = new CreateLogGroupParams();  
        body.withTtlInDays(7);  
        body.withLogGroupName("lts-group-01nh");  
        request.withBody(body);  
        try {  
            CreateLogGroupResponse response = client.createLogGroup(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Creating a log group

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateLogGroupRequest()
        request.body = CreateLogGroupParams(
            ttl_in_days=7,
            log_group_name="lts-group-01nh"
        )
        response = client.create_log_group(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Creating a log group

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateLogGroupRequest{}
request.Body = &model.CreateLogGroupParams{
    TtlInDays: int32(7),
    LogGroupName: "lts-group-01nh",
}
response, err := client.CreateLogGroup(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The request is successful and the log group has been created.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.2.2 Querying All Log Groups of an Account

### Function

This API is used to query all log groups of an account.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/groups

**Table 6-55** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

### Request Parameters

**Table 6-56** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 200**

**Table 6-57** Response body parameters

Parameter	Type	Description
log_groups	Array of <b>LogGroup</b> objects	Log group information.

**Table 6-58** LogGroup

Parameter	Type	Description
creation_time	Long	Log group creation time.
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
ttl_in_days	Integer	Log retention duration (in days). Minimum: <b>1</b> Maximum: <b>365</b>
tag	Map<String,String >	Log group tag.

**Status code: 401**

**Table 6-59** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: • <b>LTS.0403</b>
error_msg	String	Error message. Enumeration values: • <b>Invalid projectId</b>

**Status code: 403**



**Table 6-60** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-61** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Querying All Log Groups of an Account

```
GET https://{endpoint}/v2/{project_id}/groups
/v2/{project_id}/groups
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "log_groups" : [ {
    "creation_time" : 1630547141853,
    "log_group_name" : "lts-group-01nh",
    "log_group_id" : "b6b9332b-091f-4b22-b810-264318d2d664",
    "ttl_in_days" : 7
  } ]
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "Invalid token"
}
```

**Status code: 403**

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

**Status Codes**

Status Code	Description
200	The request is successful.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

**Error Codes**

See [Error Codes](#).

**6.2.3 Deleting a Log Group**

**Function**

This API is used to delete a specified log group. If log transfer is enabled for log streams in a log group, you need to disable the log transfer before the deletion.

## Calling Method

For details, see [Calling APIs](#).

## URI

DELETE /v2/{project\_id}/groups/{log\_group\_id}

**Table 6-62** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-63** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

### Status code: 400

**Table 6-64** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

### Status code: 401

**Table 6-65** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

### Status code: 403

**Table 6-66** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

### Status code: 500

**Table 6-67** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"><li>• <b>LTS.0403</b></li></ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"><li>• <b>Invalid projectId</b></li></ul>

## Example Requests

Deleting a log group

```
DELETE https://{endpoint}/v2/{project_id}/groups/{log_group_id}
/v2/{project_id}/groups/{log_group_id}
```

## Example Responses

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0201",
  "error_msg" : "The log group is not existed"
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "Invalid token"
}
```

### Status code: 403

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

### Status code: 500

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0103",
```

```
"error_msg" : "Failed to delete log group"  
}
```

## Status Codes

Status Code	Description
204	The request is successful and the log group has been deleted.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.2.4 Modifying a Log Group

### Function

This API is used to modify the log retention duration of a specified log group.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/groups/{log\_group\_id}

**Table 6-68** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-69** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-70** Request body parameters

Parameter	Mandatory	Type	Description
ttl_in_days	Yes	Integer	Log retention duration (in days). Minimum value: 1 Maximum value: 365 Default: 7
tags	No	Array of <a href="#">tagsBody</a> objects	Tag field information.

**Table 6-71** tagsBody

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
value	No	String	Tag value.

## Response Parameters

Status code: 200

**Table 6-72** Response body parameters

Parameter	Type	Description
creation_time	Long	Indicates the time when a log group was created, in milliseconds.
log_group_name	String	Log group name. Minimum: 1 Maximum: 64
log_group_id	String	Log group ID. Minimum: 36 Maximum: 36
ttl_in_days	Integer	Log retention duration. The value ranges from 1 to 365 days. Minimum: 1 Maximum: 365 Enumeration values: • 7



**Status code: 400**

**Table 6-73** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 401**

**Table 6-74** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 403**

**Table 6-75** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-76** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"><li>• <b>LTS.0403</b></li></ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"><li>• <b>Invalid projectId</b></li></ul>

## Example Requests

Modifying a log group

```
POST https://{endpoint}/v2/{project_id}/groups/{log_group_id}
{
  "ttl_in_days" : 8
}
```

## Example Responses

### Status code: 200

The request is successful and the log group has been modified.

```
{
  "creation_time" : 156541515155541,
  "log_group_name" : "string",
  "log_group_id" : "string",
  "ttl_in_days" : 8
}
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0009",
  "error_msg" : "Failed to validate the request body"
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0414",
  "error_msg" : "Invalid token"
}
```

### Status code: 403

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0102",
  "error_msg" : "Failed to update log group"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Modifying a log group

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class UpdateLogGroupSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateLogGroupRequest request = new UpdateLogGroupRequest();
        request.withLogGroupId("{log_group_id}");
        UpdateLogGroupParams body = new UpdateLogGroupParams();
        body.withTtlInDays(8);
        request.withBody(body);
        try {
            UpdateLogGroupResponse response = client.updateLogGroup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        }
    }
}
```

```
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Modifying a log group

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateLogGroupRequest()
        request.log_group_id = "{log_group_id}"
        request.body = UpdateLogGroupParams(
            ttl_in_days=8
        )
        response = client.update_log_group(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Modifying a log group

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)
```

```

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateLogGroupRequest{}
    request.LogGroupId = "{log_group_id}"
    request.Body = &model.UpdateLogGroupParams{
        TtlInDays: int32(8),
    }
    response, err := client.UpdateLogGroup(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful and the log group has been modified.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.3 Log Stream Management

### 6.3.1 Creating a Log Stream

#### Function

This API is used to create a log stream in a specified log group.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

POST /v2/{project\_id}/groups/{log\_group\_id}/streams

**Table 6-77** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-78** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-79** Request body parameters

Parameter	Mandatory	Type	Description
log_stream_name	Yes	String	Name of the log stream to be created. Minimum: <b>1</b> Maximum: <b>64</b>
ttl_in_days	No	Integer	Log retention period. Minimum: <b>1</b> Maximum: <b>365</b>
tags	No	Array of <a href="#">tagsBody</a> objects	Tag field information.
log_stream_name_alias	No	String	Log stream alias. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
enterprise_project_name	No	String	Enterprise project name. When you create a log stream, if you do not set this parameter or there are no other enterprise projects available, enterprise project <b>default</b> is used. You can view all enterprise projects on the <b>Enterprise Project Management Service</b> page. Minimum: <b>1</b> Maximum: <b>255</b>

**Table 6-80** tagsBody

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
value	No	String	Tag value.

## Response Parameters

**Status code: 201**

**Table 6-81** Response body parameters

Parameter	Type	Description
log_stream_id	String	ID of the created log stream. Minimum: <b>36</b> Maximum: <b>36</b>

**Status code: 400**

**Table 6-82** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>



Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 401**

**Table 6-83** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 403**

**Table 6-84** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 500**

**Table 6-85** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>

Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

Creating a log stream

```
POST https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams
{
  "log_stream_name" : "lts-stream-02kh"
}
```

## Example Responses

### Status code: 201

The request is successful and the log stream has been created.

```
{
  "log_stream_id" : "c54dbc58-0fd8-48ed-b007-6d54981427a7"
}
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0009",
  "error_msg" : "Failed to validate the request body"
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "Invalid token"
}
```

### Status code: 403

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

### Status code: 500

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0202",
  "error_msg" : "Failed to create Log stream"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a log stream

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class CreateLogStreamSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();

        CreateLogStreamRequest request = new CreateLogStreamRequest();
        request.withLogGroupId("{log_group_id}");
        CreateLogStreamParams body = new CreateLogStreamParams();
        body.withLogStreamName("lts-stream-02kh");
        request.withBody(body);
        try {
            CreateLogStreamResponse response = client.createLogStream(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

### Creating a log stream

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateLogStreamRequest()
        request.log_group_id = "{log_group_id}"
        request.body = CreateLogStreamParams(
            log_stream_name="lts-stream-02kh"
        )
        response = client.create_log_stream(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Creating a log stream

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
```

```

WithAk(ak).
WithSk(sk).
WithProjectId(projectId).
Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateLogStreamRequest{}
request.LogGroupId = "{log_group_id}"
request.Body = &model.CreateLogStreamParams{
    LogStreamName: "lts-stream-02kh",
}
response, err := client.CreateLogStream(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The request is successful and the log stream has been created.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.3.2 Querying All Log Streams in a Specified Log Group

### Function

This API is used to query information about all log streams in a specified log group.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/groups/{log\_group\_id}/streams

**Table 6-86** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

### Request Parameters

**Table 6-87** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

Table 6-88 Response body parameters

Parameter	Type	Description
log_streams	Array of <a href="#">LogStreamResBody</a> objects	Log stream.

Table 6-89 LogStreamResBody

Parameter	Type	Description
creation_time	Long	Creation time. Minimum value: 1577808000000 Maximum value: 4102416000000
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_stream_name_alias	String	Log stream alias.
tag	Map<String,String>	Log stream tags.
filter_count	Integer	Number of filters. Minimum: <b>0</b> Maximum: <b>5</b>
is_favorite	Boolean	Whether to add a log stream to favorites.

Parameter	Type	Description
whether_log_storage	Boolean	Whether to enable log storage.
hot_cold_separation	Boolean	Whether to enable cold storage.
auth_web_tracking	Boolean	Anonymous write switch.
ttl_in_days	Integer	Storage duration.
hot_storage_days	Integer	Standard storage duration.

**Status code: 401****Table 6-90** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"><li>• <b>LTS.0403</b></li></ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"><li>• <b>Invalid projectId</b></li></ul>

**Status code: 403****Table 6-91** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"><li>• <b>LTS.0403</b></li></ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"><li>• <b>Invalid projectId</b></li></ul>

**Status code: 500**



**Table 6-92** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>

## Example Requests

Querying All Log Streams in a Specified Log Group

```
GET https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams
/v2/{project_id}/groups/{log_group_id}/streams
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "log_streams": [ {
    "log_stream_name_alias": "3",
    "creation_time": 1723102152593,
    "auth_web_tracking": false,
    "log_stream_name": "3",
    "is_favorite": false,
    "hot_storage_days": -1,
    "tag": {
      "_sys_enterprise_project_id": "0"
    },
    "hot_cold_separation": false,
    "filter_count": 0,
    "log_stream_id": "667293b4-7f6d-4efb-9b30-xxxxxxx",
    "ttl_in_days": -1,
    "whether_log_storage": true
  }, {
    "log_stream_name_alias": "5",
    "creation_time": 1723102172632,
    "auth_web_tracking": false,
    "log_stream_name": "5",
    "is_favorite": false,
    "hot_storage_days": -1,
    "tag": {
      "_sys_enterprise_project_id": "0"
    },
    "hot_cold_separation": false,
    "filter_count": 0,
    "log_stream_id": "fb08a859-69ed-4bbe-9ba0-xxxxxxx",
    "ttl_in_days": -1,
    "whether_log_storage": true
  } ]
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "Invalid token"
}
```

**Status code: 403**

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

## Status Codes

Status Code	Description
200	The request is successful.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.3.3 Querying Log Streams

### Function

This API is used to query log streams.

## Calling Method

For details, see [Calling APIs](#).

## URI

GET /v2/{project\_id}/log-streams

**Table 6-93** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-94** Query Parameters

Parameter	Mandatory	Type	Description
log_group_name	No	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_stream_name	No	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

## Request Parameters

**Table 6-95** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

Table 6-96 Response body parameters

Parameter	Type	Description
log_streams	Array of <a href="#">LogStreamNolsFavorite</a> objects	List of log groups.

Table 6-97 LogStreamNolsFavorite

Parameter	Type	Description
creation_time	Long	Time when a log stream is created. Minimum: <b>1577808000000</b> Maximum: <b>4102416000000</b>
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_stream_name_alias	String	Log stream alias.
tag	Map<String,String>	Log stream tag.
filter_count	Integer	Number of filters. Minimum: <b>0</b> Maximum: <b>5</b>
hot_cold_separation	String	Hot and cold storage switch.

Parameter	Type	Description
whether_log_storage	String	Whether to enable log storage.
auth_web_tracking	String	Anonymous write switch.
ttl_in_days	String	Log storage duration (days).
hot_storage_days	String	Standard storage duration (days).

**Status code: 400**

**Table 6-98** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-99** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

If you leave the request body empty, all log streams are queried. If **log\_group\_name** and **log\_stream\_name** are specified, the corresponding log stream is queried.

```
GET https://{endpoint}/v2/{project_id}/log-streams
/v2/{project_id}/log-streams /v2/{project_id}/log-streams?log_group_name=lbs-group-txxxx
/v2/{project_id}/log-streams?log_stream_name=lbs-xunjian-topic-xxxx
/v2/{project_id}/log-streams?log_stream_name=lbs-xunjian-topic-xxxx&log_group_name=lbs-group-xxx
```

## Example Responses

### Status code: 200

Log stream information is returned.

```
{
  "log_streams": [ {
    "log_stream_name_alias": "lts-topic-xxxx",
    "creation_time": 1698915657847,
    "auth_web_tracking": false,
    "log_stream_name": "lts-topic-xxxx",
    "is_favorite": false,
    "hot_storage_days": -1,
    "tag": {
      "_sys_enterprise_project_id": "xxxxxx"
    },
    "hot_cold_separation": false,
    "filter_count": 0,
    "log_stream_id": "xxxxxxx",
    "ttl_in_days": 7,
    "whether_log_storage": true
  }, {
    "log_stream_name_alias": "lts-topic-xxxx",
    "creation_time": 1698915650021,
    "auth_web_tracking": false,
    "log_stream_name": "lts-topic-xxxx",
    "is_favorite": false,
    "hot_storage_days": -1,
    "tag": {
      "_sys_enterprise_project_id": "xxxxxxx"
    },
    "hot_cold_separation": false,
    "filter_count": 0,
    "log_stream_id": "xxxxxxxxxxxxxxxxxxxx",
    "ttl_in_days": 7,
    "whether_log_storage": true
  } ]
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.0205",
  "error_msg": "The log stream name has been existed"
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0010",
  "error_msg": "The system encountered an internal error"
}
```

## Status Codes

Status Code	Description
200	Log stream information is returned.

Status Code	Description
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

### 6.3.4 Deleting a Log Stream

#### Function

This API is used to delete a specified log stream from a specified log group. If log transfer is enabled for a log stream, you need to disable the log transfer before the deletion.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

DELETE /v2/{project\_id}/groups/{log\_group\_id}/streams/{log\_stream\_id}

**Table 6-100** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-101** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 400**

**Table 6-102** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>



**Status code: 401**

**Table 6-103** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 403**

**Table 6-104** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-105** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Deleting a log stream

```
DELETE https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}
/v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}
```

## Example Responses

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0208",
  "error_msg" : "The log stream does not existed"
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "Invalid token"
}
```

### Status code: 403

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

### Status code: 500

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0203",
  "error_msg" : "Failed to delete Log stream"
}
```

## Status Codes

Status Code	Description
204	The request is successful and the log stream has been deleted.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

Status Code	Description
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

### 6.3.5 Creating an Index for a Specified Log Stream

#### Function

This API is used to create an index for a specified log stream.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

POST /v1.0/{project\_id}/groups/{group\_id}/stream/{stream\_id}/index/config

**Table 6-106** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-107** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> .
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> .

**Table 6-108** Request body parameters

Parameter	Mandatory	Type	Description
logStreamId	Yes	String	Log stream ID.
fullTextIndex	Yes	<a href="#">LTSFullTextIndexInfo</a> object	Whole text indexing configuration.
fields	No	Array of <a href="#">LTSFieldsInfo</a> objects	Field indexing configuration.

**Table 6-109** LTSFullTextIndexInfo

Parameter	Mandatory	Type	Description
enable	Yes	Boolean	Whether to enable whole text indexing.
caseSensitive	Yes	Boolean	Whether the value of the field is case-sensitive.

Parameter	Mandatory	Type	Description
includeChinese	Yes	Boolean	Whether Chinese characters are contained.
tokenizer	Yes	String	Custom delimiter. Minimum: <b>0</b> Maximum: <b>128</b>
ascii	No	Array of strings	Special delimiter. Minimum: <b>1</b> Maximum: <b>3</b>

**Table 6-110** LTSFieldsInfo

Parameter	Mandatory	Type	Description
fieldType	Yes	String	Field type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>string</b></li> <li>• <b>long</b></li> <li>• <b>float</b></li> <li>• <b>json</b></li> </ul>
fieldName	Yes	String	Field name. Minimum: <b>1</b> Maximum: <b>256</b>
caseSensitive	No	Boolean	Whether the value of the field is case-sensitive. Default: <b>false</b>
includeChinese	No	Boolean	Whether Chinese characters are contained. Default: <b>false</b>
tokenizer	Yes	String	Delimiter. Minimum: <b>0</b> Maximum: <b>128</b>
quickAnalysis	No	Boolean	Whether to enable quick analysis. Default: <b>false</b>
ascii	No	Array of strings	Special delimiter.

Parameter	Mandatory	Type	Description
ltsSubFieldsInfoList	No	Array of <b>LTSSubFieldsInfo</b> objects	JSON field information.

**Table 6-111** LTSSubFieldsInfo

Parameter	Mandatory	Type	Description
fieldType	Yes	String	Field type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>string</b></li> <li>• <b>long</b></li> <li>• <b>float</b></li> </ul>
fieldName	Yes	String	Field name. Minimum: <b>1</b> Maximum: <b>256</b>
caseSensitive	No	Boolean	Whether the value of the field is case-sensitive. Default: <b>false</b>
includeChinese	No	Boolean	Whether Chinese characters are contained. Default: <b>false</b>
tokenizer	No	String	Delimiter. Minimum: <b>0</b> Maximum: <b>128</b>
quickAnalysis	No	Boolean	Whether to enable quick analysis. Default: <b>false</b>
ascii	No	Array of strings	Special delimiter.

## Response Parameters

Status code: 200

**Table 6-112** Response body parameters

Parameter	Type	Description
errorCode	String	Error code.
errorMessage	String	Error description.
result	String	Result.
isQueryComplete	Boolean	Whether the query is complete.

**Status code: 400**

**Table 6-113** Response body parameters

Parameter	Type	Description
errorCode	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
errorMessage	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 401**

**Table 6-114** Response body parameters

Parameter	Type	Description
errorCode	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
errorMessage	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-115** Response body parameters

Parameter	Type	Description
errorCode	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
errorMessage	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Create an index for a specified log stream.

```
POST https://{endpoint}/v1.0/{project_id}/groups/{group_id}/stream/{stream_id}/index/config
{
  "logStreamId" : "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
  "fullTextIndex" : {
    "enable" : true,
    "caseSensitive" : false,
    "includeChinese" : true,
    "tokenizer" : ", \"';=()[]{}@&<>:/:\n\t\r"
  },
  "fields" : [ {
    "fieldType" : "long",
    "fieldName" : "fieldName1",
    "caseSensitive" : false,
    "includeChinese" : true,
    "tokenizer" : "",
    "quickAnalysis" : true
  }, {
    "fieldType" : "string",
    "fieldName" : "fieldName2",
    "caseSensitive" : false,
    "includeChinese" : true,
    "tokenizer" : "",
    "quickAnalysis" : true
  } ]
}
```

## Example Responses

### Status code: 200

Indexing is added successfully.

```
{
  "errorCode" : "SVCSTG.ALS.200200",
  "errorMessage" : "add or update indexConfig successfully",
  "isQueryComplete" : true,
  "result" : "493d04ce-5130-4b07-88be-c5ae3b50bccb"
}
```

### Status code: 400

Incorrect request parameter . Modify the parameter based on the response body.

```
{
  "errorCode" : "SVCSTG.ALS.200201",
```



```
"errorMessage" : "IndexConfigInfo check failed.",  
"isQueryComplete" : true  
}
```

**Status code: 401**

Authentication failed. Check whether the authentication information has expired.

```
{  
  "error_msg" : "Incorrect IAM authentication information: decrypt token fail",  
  "error_code" : "APIGW.0301",  
  "request_id" : "b16cc9d789f34cd5196d8df065341788"  
}
```

**Status code: 500**

The service backend has received the request, but an internal processing error occurs.

```
{  
  "highLightFields" : { },  
  "errorCode" : "LTS.0203",  
  "errorMessage" : "Internal Server Error",  
  "result" : null,  
  "encoded_authorization_message" : null,  
  "isQueryComplete" : true  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Create an index for a specified log stream.

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CreateLogStreamIndexSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);
```

```
LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
CreateLogStreamIndexRequest request = new CreateLogStreamIndexRequest();
request.withGroupId("{group_id}");
request.withStreamId("{stream_id}");
LTSIndexConfigInfo body = new LTSIndexConfigInfo();
List<LTSFieldsInfo> listbodyFields = new ArrayList<>();
listbodyFields.add(
    new LTSFieldsInfo()
        .withFieldType(LTSFieldsInfo.FieldTypeEnum.fromValue("long"))
        .withFieldName("fieldName1")
        .withCaseSensitive(false)
        .withIncludeChinese(true)
        .withTokenizer("")
        .withQuickAnalysis(true)
);
listbodyFields.add(
    new LTSFieldsInfo()
        .withFieldType(LTSFieldsInfo.FieldTypeEnum.fromValue("string"))
        .withFieldName("fieldName2")
        .withCaseSensitive(false)
        .withIncludeChinese(true)
        .withTokenizer("")
        .withQuickAnalysis(true)
);
LTSFullTextIndexInfo fullTextIndexbody = new LTSFullTextIndexInfo();
fullTextIndexbody.withEnable(true)
    .withCaseSensitive(false)
    .withIncludeChinese(true)
    .withTokenizer(", "";=()[]{}@&<>/:\\n\\t\\r");
body.withLogStreamId("xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx");
body.withFields(listbodyFields);
body.withFullTextIndex(fullTextIndexbody);
request.withBody(body);
try {
    CreateLogStreamIndexResponse response = client.createLogStreamIndex(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Create an index for a specified log stream.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
```

```
# In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = CreateLogStreamIndexRequest()
    request.group_id = "{group_id}"
    request.stream_id = "{stream_id}"
    listFieldsbody = [
        LTSFieldsInfo(
            field_type="long",
            field_name="fieldName1",
            case_sensitive=False,
            include_chinese=True,
            tokenizer="",
            quick_analysis=True
        ),
        LTSFieldsInfo(
            field_type="string",
            field_name="fieldName2",
            case_sensitive=False,
            include_chinese=True,
            tokenizer="",
            quick_analysis=True
        )
    ]
    fullTextIndexbody = LTSFullTextIndexInfo(
        enable=True,
        case_sensitive=False,
        include_chinese=True,
        tokenizer="";=() []{}@&<>/:\\n\\t\\r"
    )
    request.body = LTSIndexConfigInfo(
        log_stream_id="xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
        fields=listFieldsbody,
        full_text_index=fullTextIndexbody
    )
    response = client.create_log_stream_index(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

Create an index for a specified log stream.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
// risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
// variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
// example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateLogStreamIndexRequest{}
request.GroupId = "{group_id}"
request.StreamId = "{stream_id}"
caseSensitiveFields:= false
includeChineseFields:= true
quickAnalysisFields:= true
caseSensitiveFields1:= false
includeChineseFields1:= true
quickAnalysisFields1:= true
var listFieldsbody = []model.LtsFieldsInfo{
    {
        FieldType: model.GetLtsFieldsInfoFieldTypeEnum().LONG,
        FieldName: "fieldName1",
        CaseSensitive: &caseSensitiveFields,
        IncludeChinese: &includeChineseFields,
        Tokenizer: "",
        QuickAnalysis: &quickAnalysisFields,
    },
    {
        FieldType: model.GetLtsFieldsInfoFieldTypeEnum().STRING,
        FieldName: "fieldName2",
        CaseSensitive: &caseSensitiveFields1,
        IncludeChinese: &includeChineseFields1,
        Tokenizer: "",
        QuickAnalysis: &quickAnalysisFields1,
    },
}
fullTextIndexbody := &model.LtsFullTextIndexInfo{
    Enable: true,
    CaseSensitive: false,
    IncludeChinese: true,
    Tokenizer: ", ""=() []{}@&<>/:\n\t\r",
}
request.Body = &model.LtsIndexConfigInfo{
    LogStreamId: "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    Fields: &listFieldsbody,
    FullTextIndex: fullTextIndexbody,
}
response, err := client.CreateLogStreamIndex(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Indexing is added successfully.
400	Incorrect request parameter . Modify the parameter based on the response body.
401	Authentication failed. Check whether the authentication information has expired.
500	The service backend has received the request, but an internal processing error occurs.

## Error Codes

See [Error Codes](#).

## 6.3.6 Modifying a Log Stream

### Function

This API is used to modify the log retention duration of a specified log stream.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/{project\_id}/groups/{log\_group\_id}/streams-ttl/{log\_stream\_id}

**Table 6-116** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-117** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-118** Request body parameters

Parameter	Mandatory	Type	Description
ttl_in_days	Yes	Integer	Log retention period (days). Minimum: <b>1</b> Maximum: <b>365</b>

Parameter	Mandatory	Type	Description
tags	No	Array of <b>tagsBody</b> objects	Tag field information.

**Table 6-119** tagsBody

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
value	No	String	Tag value.

## Response Parameters

**Status code: 200**

**Table 6-120** Response body parameters

Parameter	Type	Description
creation_time	Long	Time when a log stream is created.
log_topic_name	String	Name of a log stream. Minimum: <b>1</b> Maximum: <b>64</b>
log_topic_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
ttl_in_days	Integer	Log retention duration (in days).

**Status code: 400**

**Table 6-121** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>

Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 401**

**Table 6-122** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 403**

**Table 6-123** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-124** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>



Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

Modify a log stream.

```
PUT https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams-ttl/{log_stream_id}
{
  "ttl_in_days" : 8
}
```

## Example Responses

### Status code: 200

The request has succeeded and the log group has been modified.

```
{
  "creation_time" : 1629947408497,
  "log_topic_name" : "string",
  "log_topic_id" : "string",
  "ttl_in_days" : 8
}
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0009",
  "error_msg" : "Failed to validate the request body"
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0414",
  "error_msg" : "Invalid token"
}
```

### Status code: 403

Forbidden. The request is rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

### Status code: 500

InternalServerError. The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0204",
  "error_msg" : "Failed to update log stream"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modify a log stream.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class UpdateLogStreamSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateLogStreamRequest request = new UpdateLogStreamRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
        UpdateLogStreamParams body = new UpdateLogStreamParams();
        body.withTtlInDays(8);
        request.withBody(body);
        try {
            UpdateLogStreamResponse response = client.updateLogStream(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
        }
    }
}
```

```
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Modify a log stream.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateLogStreamRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        request.body = UpdateLogStreamParams(
            ttl_in_days=8
        )
        response = client.update_log_stream(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Modify a log stream.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
```

```

example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateLogStreamRequest{}
request.LogGroupId = "{log_group_id}"
request.LogStreamId = "{log_stream_id}"
request.Body = &model.UpdateLogStreamParams{
    TTLInDays: int32(8),
}
response, err := client.UpdateLogStream(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request has succeeded and the log group has been modified.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden. The request is rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.4 Log Management

### 6.4.1 Collecting Traffic Statistics on Top N Log Groups or Log Streams

#### Function

This API is used to collect traffic statistics on top n log groups or log streams.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

POST /v2/{project\_id}/lts/topn-traffic-statistics

**Table 6-125** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

#### Request Parameters

**Table 6-126** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-127** Request body parameters

Parameter	Mandatory	Type	Description
end_time	Yes	Long	End timestamp, in milliseconds.
is_desc	Yes	Boolean	Whether to sort data in descending order ( <b>true</b> or <b>false</b> ).
resource_type	Yes	String	Resource type: The value is log_group / log_stream / tenant. <b>log_group</b> : log group <b>log_stream</b> : log stream <b>tenant</b> : tenant
sort_by	Yes	String	Sorting criteria: <b>index</b> , <b>write</b> , <b>storage</b> , <b>basicTransfer</b> , <b>seniorTransfer</b> , or <b>coldStorage</b> . The value must exist in <b>search_list</b> . <b>index</b> : index <b>write</b> : read and write <b>storage</b> : storage <b>basicTransfer</b> : basic transfer <b>seniorTransfer</b> : advanced transfer <b>coldStorage</b> : cold storage capacity
start_time	Yes	Long	Start timestamp of the query, in milliseconds. A maximum of 30 days are supported.
topn	Yes	Integer	Number of data records to be queried. The value ranges from 1 to 100.

Parameter	Mandatory	Type	Description
filter	Yes	Map<String,String>	Filter criteria { "log_group_id": "xxxxxx" }Filter is in the map structure. The key is the filtering attribute, and the value is the attribute value. Fuzzy match is not supported.
search_list	Yes	Array of strings	Query data type. Multiple string arrays can be used together. This parameter can be set only to <b>index</b> , <b>write</b> , <b>storage</b> , <b>basicTransfer</b> , <b>seniorTransfer</b> , or <b>coldStorage</b> . <b>index</b> : index <b>write</b> : read and write <b>storage</b> : storage <b>basicTransfer</b> : basic transfer <b>seniorTransfer</b> : advanced transfer <b>coldStorage</b> : cold storage capacity

## Response Parameters

Status code: 200

Table 6-128 Response body parameters

Parameter	Type	Description
results	Array of <b>ResultsTopnBody</b> objects	Response result.

Table 6-129 ResultsTopnBody

Parameter	Type	Description
index_traffic	Double	Index traffic, in bytes. This parameter is returned when the queried data type contains <b>index</b> .

Parameter	Type	Description
storage	Double	Storage capacity, in bytes. This parameter is returned when the queried data type contains <b>storage</b> .
write_traffic	Double	Write traffic, in bytes. This parameter is returned when the queried data type contains <b>write</b> .
log_group_id	String	Log group ID. This parameter is returned when the resource type is log group.
log_group_name	String	Log group name. This parameter is returned when the resource type is log group.
log_stream_id	String	Log stream ID. This parameter is returned when the resource type is log stream.
log_stream_name	String	Log stream name. This parameter is returned when the resource type is log stream.
basic_transfer	Double	Basic transfer traffic, in bytes. This parameter is returned when the queried data type contains <b>basicTransfer</b> .
senior_transfer	Double	Advanced transfer traffic, in bytes. This parameter is returned when the queried data type contains <b>seniorTransfer</b> .
is_agency_transfer	Boolean	If the value is <b>true</b> , the stream displayed in the front-end resource statistics cannot be skipped. Default: <b>false</b>
cold_storage	Double	Cold storage capacity.

**Status code: 400**

**Table 6-130** Response body parameters

Parameter	Type	Description
errorCode	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>



Parameter	Type	Description
errorMessage	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-131** Response body parameters

Parameter	Type	Description
errorCode	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
errorMessage	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Collecting Traffic Statistics on Top N Log Groups or Log Streams

```
/v2/2a473356cca5487f8373be891bffc1cf/lts/topn-traffic-statistics
```

```
{
  "sort_by": "storage",
  "is_desc": true,
  "resource_type": "log_stream",
  "filter": { },
  "start_time": 1668668183969,
  "end_time": 1669272983969,
  "search_list": [ "index", "write", "storage" ],
  "topn": 100
}
```

## Example Responses

**Status code: 200**

Query succeeded.

```
{
  "results": [ {
    "index_traffic": 0,
    "log_stream_id": "6fd93d47-7630-4284-a622-311d0082f6bb",
    "log_stream_name": "cmdb-cce-cluster",
    "storage": 59810657587,
    "write_traffic": 0
  }, {
    "index_traffic": 0,
    "log_stream_id": "504ec3dd-ac28-4783-babb-22a49f36afe3",
    "log_stream_name": "CMSkaifatest",

```

```
"storage" : 20033606015,
"write_traffic" : 0
}, {
  "index_traffic" : 6825703991,
  "log_stream_id" : "a14dacb0-5a13-43a8-89a3-ea5424d95133",
  "log_stream_name" : "ELB",
  "storage" : 15659303771,
  "write_traffic" : 1.3651407982E9
}, {
  "index_traffic" : 302172889,
  "log_stream_id" : "25fe7494-7395-438e-8340-647613673ffa",
  "log_stream_name" : "LTStest-916-statefulset",
  "storage" : 316552589,
  "write_traffic" : 6.04345778E7
}, {
  "index_traffic" : 0,
  "log_stream_id" : "956586fc-b828-44be-8672-0a323962a8fa",
  "log_stream_name" : "mongodb_slow",
  "storage" : 0,
  "write_traffic" : 0
}
}]
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode" : "LTS.0208",
  "errorMessage" : "The log stream does not existed"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "errorCode" : "LTS.0203",
  "errorMessage" : "Internal Server Error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Collecting Traffic Statistics on Top N Log Groups or Log Streams

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;
import java.util.Map;
import java.util.HashMap;

public class ListTopnTrafficStatisticsSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    LtsClient client = LtsClient.newBuilder()
        .withCredential(auth)
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();
    ListTopnTrafficStatisticsRequest request = new ListTopnTrafficStatisticsRequest();
    TopnRequestBody body = new TopnRequestBody();
    List<String> listbodySearchList = new ArrayList<>();
    listbodySearchList.add("index");
    listbodySearchList.add("write");
    listbodySearchList.add("storage");
    body.withSearchList(listbodySearchList);
    body.withTopn(100);
    body.withStartTime(1668668183969L);
    body.withSortBy("storage");
    body.withResourceType("log_stream");
    body.withIsDesc(true);
    body.withEndTime(1669272983969L);
    request.withBody(body);
    try {
        ListTopnTrafficStatisticsResponse response = client.listTopnTrafficStatistics(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

## Python

### Collecting Traffic Statistics on Top N Log Groups or Log Streams

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ListTopnTrafficStatisticsRequest()
    listSearchListbody = [
        "index",
        "write",
        "storage"
    ]
    request.body = TopnReqestBody(
        search_list=listSearchListbody,
        topn=100,
        start_time=1668668183969,
        sort_by="storage",
        resource_type="log_stream",
        is_desc=True,
        end_time=1669272983969
    )
    response = client.list_topn_traffic_statistics(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Collecting Traffic Statistics on Top N Log Groups or Log Streams

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```

```
Build()  
  
request := &model.ListTopnTrafficStatisticsRequest{}  
var listSearchListbody = []string{  
    "index",  
    "write",  
    "storage",  
}  
request.Body = &model.TopnReqstBody{  
    SearchList: listSearchListbody,  
    Topn: int32(100),  
    StartTime: int64(1668668183969),  
    SortBy: "storage",  
    ResourceType: "log_stream",  
    IsDesc: true,  
    EndTime: int64(1669272983969),  
}  
response, err := client.ListTopnTrafficStatistics(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Query succeeded.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.4.2 Querying Resources by Time Segment

### Function

This API is used to query resources by time segment.

### Calling Method

For details, see [Calling APIs](#).

## URI

POST /v2/{project\_id}/lts/timeline-traffic-statistics

**Table 6-132** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-133** Query Parameters

Parameter	Mandatory	Type	Description
timezone	Yes	String	Time zone

## Request Parameters

**Table 6-134** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-135** Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	Long	Start timestamp of the query, in milliseconds. A maximum of 30 days are supported.
end_time	Yes	Long	End timestamp, in milliseconds.
period	Yes	Integer	Query interval, in hours. The value ranges from 1 to 24.
resource_type	Yes	String	Resource type: The value is log_group / log_stream / tenant.
search_type	Yes	String	The traffic type can be <b>write</b> , <b>index</b> , <b>storage</b> , <b>basicTransfer</b> , <b>seniorTransfer</b> , or <b>coldStorage</b> .
resource_id	No	String	Resource ID. When resource type is set to <b>log_group</b> , <b>resource_id</b> indicates the log group ID. When resource type is set to <b>log_stream</b> , <b>resource_id</b> indicates the log stream ID.

## Response Parameters

Status code: 200

**Table 6-136** Response body parameters

Parameter	Type	Description
results	Array of <b>Resultits</b> objects	Response result.

**Table 6-137** Resultits

Parameter	Type	Description
timestamp	Long	Timestamp, in milliseconds.
value	Double	Traffic, in bytes.

**Status code: 400**

**Table 6-138** Response body parameters

Parameter	Type	Description
errorCode	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
errorMessage	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-139** Response body parameters

Parameter	Type	Description
errorCode	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
errorMessage	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

### Querying Resources by Time Segment

```
v2/2a473356cca5487f8373be891bffc1cf/lts/timeline-traffic-statistics?timezone=Asia/Shanghai
{
  "start_time" : 1668614400000,
  "end_time" : 1668787200000,
  "search_type" : "write",
  "period" : 1,
  "resource_type" : "tenant"
}
```

## Example Responses

**Status code: 200**

Query succeeded.

```
{
  "results" : [ {
    "timestamp" : 1669046400000,
    "value" : 8.24859442E7
  }
]
```



```
}, {
  "timestamp" : 1669071600000,
  "value" : 0
}, {
  "timestamp" : 1669161600000,
  "value" : 9.06895742E7
}, {
  "timestamp" : 1669215600000,
  "value" : 8.81524816E7
}]
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode" : "LTS.0009",
  "errorMessage" : "resource_id must not be empty"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "errorCode" : "LTS.0203",
  "errorMessage" : "Internal Server Error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Querying Resources by Time Segment

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListTimeLineTrafficStatisticsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);
```

```
LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
ListTimeLineTrafficStatisticsRequest request = new ListTimeLineTrafficStatisticsRequest();
TimelineTrafficStatisticsRequestBody body = new TimelineTrafficStatisticsRequestBody();
body.withSearchType("write");
body.withResourceType("tenant");
body.withPeriod(1);
body.withEndTime(1668787200000L);
body.withStartTime(1668614400000L);
request.withBody(body);
try {
    ListTimeLineTrafficStatisticsResponse response = client.listTimeLineTrafficStatistics(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Querying Resources by Time Segment

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListTimeLineTrafficStatisticsRequest()
        request.body = TimelineTrafficStatisticsRequestBody(
            search_type="write",
            resource_type="tenant",
            period=1,
            end_time=1668787200000,
            start_time=1668614400000
        )
        response = client.list_time_line_traffic_statistics(request)
```

```
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Querying Resources by Time Segment

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListTimeLineTrafficStatisticsRequest{
        request.Body = &model.TimelineTrafficStatisticsRequestBody{
            SearchType: "write",
            ResourceType: "tenant",
            Period: int32(1),
            EndTime: int64(1668787200000),
            StartTime: int64(1668614400000),
        }
    }
    response, err := client.ListTimeLineTrafficStatistics(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Query succeeded.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.4.3 Querying Logs

### Function

This API is used to query logs in a specified log stream.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/groups/{log\_group\_id}/streams/{log\_stream\_id}/content/  
query

**Table 6-140** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-141** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-142** Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	UTC start time of the search window (in milliseconds). Maximum query time range: 180 days

Parameter	Mandatory	Type	Description
end_time	Yes	String	UTC end time of the search window (in milliseconds). Maximum query time range: 180 days
labels	No	Map<String,String>	Filter criteria, which vary between log sources.
keywords	No	String	Keyword used for log search. A keyword is a word between two adjacent delimiters, for example, error.
line_num	No	String	Sequence number of a log event. This parameter is not required for the first query, but is required for subsequent pagination queries. The value can be obtained from the response of the last query. The value of <b>line_num</b> is between the values of <b>start_time</b> and <b>end_time</b> . If the custom time function is enabled, you need to use both this field and the <b>time</b> field to perform pagination query. Minimum: <b>19</b> Maximum: <b>19</b>
__time__	No	String	If the custom time function is enabled, use both this field and the <b>line_num</b> field for pagination queries. The parameter values can be obtained from the returned information of the last query.
is_desc	No	Boolean	Whether the search order is descending or ascending. The default value is <b>false</b> , indicating that search results are displayed in ascending order. Enumeration values: <ul style="list-style-type: none"> <li>• <b>false</b></li> </ul>

Parameter	Mandatory	Type	Description
search_type	No	String	The value is <b>init</b> (default value) for the first query, or <b>forwards</b> or <b>backwards</b> for a pagination query. This parameter is used together with <b>is_desc</b> for pagination queries. Enumeration values: <ul style="list-style-type: none"> <li>• <b>forwards</b></li> </ul>
limit	No	Integer	Number of logs to be queried each time. The value is <b>50</b> when this parameter is not set. You are advised to set this parameter to <b>100</b> . Minimum: <b>1</b> Maximum: <b>5000</b>
highlight	No	Boolean	Whether the keyword is highlighted. The default value is <b>true</b> , indicating that the keyword is highlighted. Default: <b>true</b>
is_count	No	Boolean	Whether the number of log events is counted. The default value is <b>false</b> , indicating that the number of log events is not counted.
is_iterative	No	Boolean	Whether the log query is iterative. The default value is <b>false</b> , indicating that the log query is not iterative.
query	No	String	Use a SQL analysis statement with the pipe character for query. This parameter takes effect only when <b>is_analysis_query</b> is set to <b>true</b> .

Parameter	Mandatory	Type	Description
is_analysis_query	No	Boolean	Whether a SQL analysis statement contains the pipe character. If this parameter is set to <b>true</b> , the query is performed based on the <b>query</b> parameter in the body, and parameters except <b>start_time</b> and <b>end_time</b> in the body are invalid. Functions such as pagination, sorting, and number of query results are implemented based on the SQL syntax rules. The response body of the query result is different from that when the pipe character function is disabled. The query result is returned in the default column-store mode. Currently, this function is available only to internal test users. Example response: <code>{"analysisLogs": [{"field1":"1","field2":"2","field3":"3"}, {"field1":"1","field2":"2","field3":"3"}, {"field1":"1","field2":"2","field3":"3"}]}</code> (The pipe character function is in the closed test phase. The default value of this parameter is <b>false</b> for non-whitelisted users.)

## Response Parameters

Status code: 200

Table 6-143 Response body parameters

Parameter	Type	Description
logs	Array of <a href="#">LogContents</a> objects	Log information.
count	Integer	Number of logs.



Parameter	Type	Description
isQueryComplete	Boolean	Indicates whether the query is complete.
analysisLogs	Array of objects	Response body of log analysis.

**Table 6-144** LogContents

Parameter	Type	Description
content	String	Raw log data. Minimum: <b>1</b> Maximum: <b>10000</b>
line_num	String	Sequence number of a log line. Minimum: <b>19</b> Maximum: <b>19</b>
labels	Map<String,String >	Labels contained in a log event. The labels vary depending on log events.

**Status code: 400**

**Table 6-145** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: • <b>LTS.0403</b>
error_msg	String	Error message. Enumeration values: • <b>Invalid projectId</b>

**Status code: 401**

**Table 6-146** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: • <b>LTS.0403</b>

Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 403**

**Table 6-147** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 500**

**Table 6-148** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

- Querying logs

POST https://{endpoint}/v2/{project\_id}/groups/{log\_group\_id}/streams/{log\_stream\_id}/content/query

```
{
  "start_time" : 1595659200000,
  "end_time" : 1595659500000,
  "labels" : {
    "hostName" : "ecs-kwxtest"
  },
  "keywords" : "log",
  "limit" : 10,
```

```
"is_count" : true
}
```

- Querying logs for the first time

```
v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/content/query
```

```
{
  "start_time" : 1595659200000,
  "end_time" : 1595659500000,
  "labels" : {
    "hostName" : "ecs-kwxtest"
  },
  "keywords" : "log",
  "line_num" : "1595659490239433658",
  "is_desc" : "false",
  "search_type" : "forwards",
  "limit" : "3",
  "is_count" : true
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 6**, **NO 7**, and **NO 8** are the target log events):

```
v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/content/query
```

```
{
  "start_time" : 1595659200000,
  "end_time" : 1595659500000,
  "labels" : {
    "hostName" : "ecs-kwxtest"
  },
  "keywords" : "log",
  "line_num" : "1595659490239433658",
  "is_desc" : "true",
  "search_type" : "backwards",
  "limit" : "3",
  "is_count" : true
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 8**, **NO 7**, and **NO 6** are the target log events):

```
v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/content/query
```

```
{
  "start_time" : 1595659200000,
  "end_time" : 1595659500000,
  "labels" : {
    "hostName" : "ecs-kwxtest"
  },
  "keywords" : "log",
  "line_num" : "1595659490239433658",
  "is_desc" : "false",
  "search_type" : "backwards",
  "limit" : "3",
  "is_count" : true
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 2**, **NO 3**, and **NO 4** are the target log events):

```
v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/content/query
```

```
{
  "start_time" : 1595659200000,
  "end_time" : 1595659500000,
  "labels" : {
    "hostName" : "ecs-kwxtest"
  }
}
```

```
},
"keywords": "log",
"line_num": "1595659490239433658",
"is_desc": "true",
"search_type": "forwards",
"limit": "3",
"is_count": true
}
```

- Analyze the statement query example.

```
v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/content/query
```

```
{
  "start_time": 1722324332801,
  "end_time": 1722327932801,
  "query": "* | select field1,field2 from log",
  "is_analysis_query": true
}
```

## Example Responses

### Status code: 200

The request is successful.

- Querying logs for the first time

```
{
  "count": 32,
  "logs": [ {
    "content": "2020-07-25/14:44:42 this <HighLightTag>log</HighLightTag> is Error NO 1",
    "labels": {
      "hostName": "ecs-kwxtest",
      "hostIP": "192.168.0.156",
      "appName": "default_appname",
      "containerName": "CONFIG_FILE",
      "clusterName": "CONFIG_FILE",
      "hostId": "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName": "default_procname",
      "clusterId": "CONFIG_FILE",
      "nameSpace": "CONFIG_FILE",
      "category": "LTS"
    },
    "line_num": "1595659490239433654"
  }, {
    "content": "2020-07-25/14:44:43 this <HighLightTag>log</HighLightTag> is Error NO 2",
    "labels": {
      "hostName": "ecs-kwxtest",
      "hostIP": "192.168.0.156",
      "appName": "default_appname",
      "containerName": "CONFIG_FILE",
      "clusterName": "CONFIG_FILE",
      "hostId": "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName": "default_procname",
      "clusterId": "CONFIG_FILE",
      "nameSpace": "CONFIG_FILE",
      "category": "LTS"
    },
    "line_num": "1595659490239433655"
  }, {
    "content": "2020-07-25/14:44:44 this <HighLightTag>log</HighLightTag> is Error NO 3",
    "labels": {
      "hostName": "ecs-kwxtest",
      "hostIP": "192.168.0.156",
      "appName": "default_appname",
      "containerName": "CONFIG_FILE",
      "clusterName": "CONFIG_FILE",
      "hostId": "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName": "default_procname",

```

```
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433656"
}, {
"content" : "2020-07-25/14:44:45 this <HighLightTag>log</HighLightTag> is Error NO 4",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433657"
}, {
"content" : "2020-07-25/14:44:46 this <HighLightTag>log</HighLightTag> is Error NO 5",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433658"
}, {
"content" : "2020-07-25/14:44:47 this <HighLightTag>log</HighLightTag> is Error NO 6",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433659"
}, {
"content" : "2020-07-25/14:44:48 this <HighLightTag>log</HighLightTag> is Error NO 7",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433660"
}, {
"content" : "2020-07-25/14:44:49 this <HighLightTag>log</HighLightTag> is Error NO 8",
"labels" : {
"hostName" : "ecs-kwxtest",
```

```
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433661"
}, {
"content" : "2020-07-25/14:44:50 this <HighLightTag>log</HighLightTag> is Error NO 9",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490839420574"
}, {
"content" : "2020-07-25/14:44:51 this <HighLightTag>log</HighLightTag> is Error NO 10",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659491839412667"
}
}
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 6**, **NO 7**, and **NO 8** are the target log events):

```
{
"count" : 32,
"logs" : [ {
"content" : "2020-07-25/14:44:47 this <HighLightTag>log</HighLightTag> is Error NO 6",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433659"
}, {
"content" : "2020-07-25/14:44:48 this <HighLightTag>log</HighLightTag> is Error NO 7",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
```

```

    "appName": "default_appname",
    "containerName": "CONFIG_FILE",
    "clusterName": "CONFIG_FILE",
    "hostId": "9787ef31-fd7b-4eff-ba71-72d580f11f55",
    "podName": "default_procname",
    "clusterId": "CONFIG_FILE",
    "nameSpace": "CONFIG_FILE",
    "category": "LTS"
  },
  "line_num": "1595659490239433660"
}, {
  "content": "2020-07-25/14:44:49 this <HighLightTag>log</HighLightTag> is Error NO 8",
  "labels": {
    "hostName": "ecs-kwxtest",
    "hostIP": "192.168.0.156",
    "appName": "default_appname",
    "containerName": "CONFIG_FILE",
    "clusterName": "CONFIG_FILE",
    "hostId": "9787ef31-fd7b-4eff-ba71-72d580f11f55",
    "podName": "default_procname",
    "clusterId": "CONFIG_FILE",
    "nameSpace": "CONFIG_FILE",
    "category": "LTS"
  },
  "line_num": "1595659490239433661"
}]
}

```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 8**, **NO 7**, and **NO 6** are the target log events):

```

{
  "count": 32,
  "logs": [ {
    "content": "2020-07-25/14:44:49 this <HighLightTag>log</HighLightTag> is Error NO 8",
    "labels": {
      "hostName": "ecs-kwxtest",
      "hostIP": "192.168.0.156",
      "appName": "default_appname",
      "containerName": "CONFIG_FILE",
      "clusterName": "CONFIG_FILE",
      "hostId": "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName": "default_procname",
      "clusterId": "CONFIG_FILE",
      "nameSpace": "CONFIG_FILE",
      "category": "LTS"
    },
    "line_num": "1595659490239433661"
  }, {
    "content": "2020-07-25/14:44:48 this <HighLightTag>log</HighLightTag> is Error NO 7",
    "labels": {
      "hostName": "ecs-kwxtest",
      "hostIP": "192.168.0.156",
      "appName": "default_appname",
      "containerName": "CONFIG_FILE",
      "clusterName": "CONFIG_FILE",
      "hostId": "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName": "default_procname",
      "clusterId": "CONFIG_FILE",
      "nameSpace": "CONFIG_FILE",
      "category": "LTS"
    },
    "line_num": "1595659490239433660"
  }, {
    "content": "2020-07-25/14:44:47 this <HighLightTag>log</HighLightTag> is Error NO 6",
    "labels": {
      "hostName": "ecs-kwxtest",
      "hostIP": "192.168.0.156",
      "appName": "default_appname",

```

```

"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433659"
}]
}

```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 2**, **NO 3**, and **NO 4** are the target log events):

```

{
"count" : 32,
"logs" : [ {
"content" : "2020-07-25/14:44:43 this <HighLightTag>log</HighLightTag> is Error NO 2",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433655"
}, {
"content" : "2020-07-25/14:44:44 this <HighLightTag>log</HighLightTag> is Error NO 3",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433656"
}, {
"content" : "2020-07-25/14:44:45 this <HighLightTag>log</HighLightTag> is Error NO 4",
"labels" : {
"hostName" : "ecs-kwxtest",
"hostIP" : "192.168.0.156",
"appName" : "default_appname",
"containerName" : "CONFIG_FILE",
"clusterName" : "CONFIG_FILE",
"hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
"podName" : "default_procname",
"clusterId" : "CONFIG_FILE",
"nameSpace" : "CONFIG_FILE",
"category" : "LTS"
},
"line_num" : "1595659490239433657"
}
}]
}

```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 4**, **NO 3**, and **NO 2** are the target log events):



```
{
  "count" : 32,
  "logs" : [ {
    "content" : "2020-07-25/14:44:45 this <HighLightTag>log</HighLightTag> is Error NO 4",
    "labels" : {
      "hostName" : "ecs-kwxtest",
      "hostIP" : "192.168.0.156",
      "appName" : "default_appname",
      "containerName" : "CONFIG_FILE",
      "clusterName" : "CONFIG_FILE",
      "hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName" : "default_procname",
      "clusterId" : "CONFIG_FILE",
      "nameSpace" : "CONFIG_FILE",
      "category" : "LTS"
    },
    "line_num" : "1595659490239433657"
  }, {
    "content" : "2020-07-25/14:44:44 this <HighLightTag>log</HighLightTag> is Error NO 3",
    "labels" : {
      "hostName" : "ecs-kwxtest",
      "hostIP" : "192.168.0.156",
      "appName" : "default_appname",
      "containerName" : "CONFIG_FILE",
      "clusterName" : "CONFIG_FILE",
      "hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName" : "default_procname",
      "clusterId" : "CONFIG_FILE",
      "nameSpace" : "CONFIG_FILE",
      "category" : "LTS"
    },
    "line_num" : "1595659490239433656"
  }, {
    "content" : "2020-07-25/14:44:43 this <HighLightTag>log</HighLightTag> is Error NO 2",
    "labels" : {
      "hostName" : "ecs-kwxtest",
      "hostIP" : "192.168.0.156",
      "appName" : "default_appname",
      "containerName" : "CONFIG_FILE",
      "clusterName" : "CONFIG_FILE",
      "hostId" : "9787ef31-fd7b-4eff-ba71-72d580f11f55",
      "podName" : "default_procname",
      "clusterId" : "CONFIG_FILE",
      "nameSpace" : "CONFIG_FILE",
      "category" : "LTS"
    },
    "line_num" : "1595659490239433655"
  } ]
}
```

**Status code: 400**

Bad Request: The request is invalid or the query statement is incorrect. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0009",
  "error_msg" : "Failed to validate the request body"
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "Invalid token"
}
```

**Status code: 403**

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0202",
  "error_msg" : "Failed to query lts log"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Querying logs

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.Map;
import java.util.HashMap;

public class ListLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListLogsRequest request = new ListLogsRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
```

```
QueryLtsLogParams body = new QueryLtsLogParams();
Map<String, String> listbodyLabels = new HashMap<>();
listbodyLabels.put("hostName", "ecs-kwxtest");
body.withLimit(10);
body.withKeywords("log");
body.withIsCount(true);
body.withLabels(listbodyLabels);
body.withEndTime("1595659500000");
body.withStartTime("1595659200000");
request.withBody(body);
try {
    ListLogsResponse response = client.listLogs(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- Querying logs for the first time

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.Map;
import java.util.HashMap;

public class ListLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListLogsRequest request = new ListLogsRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
        QueryLtsLogParams body = new QueryLtsLogParams();
        Map<String, String> listbodyLabels = new HashMap<>();
        listbodyLabels.put("hostName", "ecs-kwxtest");
```

```
body.withLimit(3);
body.withSearchType(QueryLtsLogParams.SearchTypeEnum.fromValue("forwards"));
body.withIsDesc(false);
body.withLineNum("1595659490239433658");
body.withKeywords("log");
body.withIsCount(true);
body.withLabels(listbodyLabels);
body.withEndTime("1595659500000");
body.withStartTime("1595659200000");
request.withBody(body);
try {
    ListLogsResponse response = client.listLogs(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 6**, **NO 7**, and **NO 8** are the target log events):

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.Map;
import java.util.HashMap;

public class ListLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListLogsRequest request = new ListLogsRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
```

```
QueryLtsLogParams body = new QueryLtsLogParams();
Map<String, String> listbodyLabels = new HashMap<>();
listbodyLabels.put("hostName", "ecs-kwxtest");
body.withLimit(3);
body.withSearchType(QueryLtsLogParams.SearchTypeEnum.fromValue("backwards"));
body.withIsDesc(true);
body.withLineNum("1595659490239433658");
body.withKeywords("log");
body.withIsCount(true);
body.withLabels(listbodyLabels);
body.withEndTime("1595659500000");
body.withStartTime("1595659200000");
request.withBody(body);
try {
    ListLogsResponse response = client.listLogs(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 8**, **NO 7**, and **NO 6** are the target log events):

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.Map;
import java.util.HashMap;

public class ListLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
    }
}
```

```
ListLogsRequest request = new ListLogsRequest();
request.withLogGroupId("{log_group_id}");
request.withLogStreamId("{log_stream_id}");
QueryLtsLogParams body = new QueryLtsLogParams();
Map<String, String> listbodyLabels = new HashMap<>();
listbodyLabels.put("hostName", "ecs-kwxtest");
body.withLimit(3);
body.withSearchType(QueryLtsLogParams.SearchTypeEnum.fromValue("backwards"));
body.withIsDesc(false);
body.withLineNum("1595659490239433658");
body.withKeywords("log");
body.withIsCount(true);
body.withLabels(listbodyLabels);
body.withEndTime("1595659500000");
body.withStartTime("1595659200000");
request.withBody(body);
try {
    ListLogsResponse response = client.listLogs(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 2**, **NO 3**, and **NO 4** are the target log events):

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.Map;
import java.util.HashMap;

public class ListLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();
ListLogsRequest request = new ListLogsRequest();
request.withLogGroupId("{log_group_id}");
request.withLogStreamId("{log_stream_id}");
QueryLtsLogParams body = new QueryLtsLogParams();
Map<String, String> listbodyLabels = new HashMap<>();
listbodyLabels.put("hostName", "ecs-kwxtest");
body.withLimit(3);
body.withSearchType(QueryLtsLogParams.SearchTypeEnum.fromValue("forwards"));
body.withIsDesc(true);
body.withLineNum("1595659490239433658");
body.withKeywords("log");
body.withIsCount(true);
body.withLabels(listbodyLabels);
body.withEndTime("1595659500000");
body.withStartTime("1595659200000");
request.withBody(body);
try {
    ListLogsResponse response = client.listLogs(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- Analyze the statement query example.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
```

```
        .build();
        ListLogsRequest request = new ListLogsRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
        QueryLtsLogParams body = new QueryLtsLogParams();
        body.withIsAnalysisQuery(true);
        body.withQuery("* | select field1,field2 from log");
        body.withEndTime("1722327932801");
        body.withStartTime("1722324332801");
        request.withBody(body);
        try {
            ListLogsResponse response = client.listLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

- Querying logs

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogsRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        listLabelsbody = {
            "hostName": "ecs-kwxtest"
        }
        request.body = QueryLtsLogParams(
            limit=10,
            keywords="log",
            is_count=True,
            labels=listLabelsbody,
            end_time="1595659500000",
```



```
        start_time="1595659200000"
    )
    response = client.list_logs(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- Querying logs for the first time

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogsRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        listLabelsbody = {
            "hostName": "ecs-kwxtest"
        }
        request.body = QueryLtsLogParams(
            limit=3,
            search_type="forwards",
            is_desc=False,
            line_num="1595659490239433658",
            keywords="log",
            is_count=True,
            labels=listLabelsbody,
            end_time="1595659500000",
            start_time="1595659200000"
        )
        response = client.list_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 6**, **NO 7**, and **NO 8** are the target log events):

```
# coding: utf-8

import os
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogsRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        listLabelsbody = {
            "hostName": "ecs-kwxtest"
        }
        request.body = QueryLtsLogParams(
            limit=3,
            search_type="backwards",
            is_desc=True,
            line_num="1595659490239433658",
            keywords="log",
            is_count=True,
            labels=listLabelsbody,
            end_time="1595659500000",
            start_time="1595659200000"
        )
        response = client.list_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 8**, **NO 7**, and **NO 6** are the target log events):

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
```

```
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ListLogsRequest()
    request.log_group_id = "{log_group_id}"
    request.log_stream_id = "{log_stream_id}"
    listLabelsbody = {
        "hostName": "ecs-kwxtest"
    }
    request.body = QueryLtsLogParams(
        limit=3,
        search_type="backwards",
        is_desc=False,
        line_num="1595659490239433658",
        keywords="log",
        is_count=True,
        labels=listLabelsbody,
        end_time="1595659500000",
        start_time="1595659200000"
    )
    response = client.list_logs(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 2**, **NO 3**, and **NO 4** are the target log events):

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogsRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        listLabelsbody = {
```

```
        "hostName": "ecs-kwxtest"
    }
    request.body = QueryLtsLogParams(
        limit=3,
        search_type="forwards",
        is_desc=True,
        line_num="1595659490239433658",
        keywords="log",
        is_count=True,
        labels=listLabelsbody,
        end_time="1595659500000",
        start_time="1595659200000"
    )
    response = client.list_logs(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- Analyze the statement query example.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogsRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        request.body = QueryLtsLogParams(
            is_analysis_query=True,
            query="* | select field1,field2 from log",
            end_time="1722327932801",
            start_time="1722324332801"
        )
        response = client.list_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

- Querying logs

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListLogsRequest{}
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    var listLabelsbody = map[string]string{
        "hostName": "ecs-kwxtest",
    }
    limitQueryLtsLogParams:= int32(10)
    keywordsQueryLtsLogParams:= "log"
    isCountQueryLtsLogParams:= true
    request.Body = &model.QueryLtsLogParams{
        Limit: &limitQueryLtsLogParams,
        Keywords: &keywordsQueryLtsLogParams,
        IsCount: &isCountQueryLtsLogParams,
        Labels: listLabelsbody,
        EndTime: "1595659500000",
        StartTime: "1595659200000",
    }
    response, err := client.ListLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Querying logs for the first time

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
)
```

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
  )
}

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListLogsRequest{}
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    var listLabelsbody = map[string]string{
        "hostName": "ecs-kwxtest",
    }
    }
    limitQueryLtsLogParams:= int32(3)
    searchTypeQueryLtsLogParams:= model.GetQueryLtsLogParamsSearchTypeEnum().FORWARDS
    isDescQueryLtsLogParams:= false
    lineNumQueryLtsLogParams:= "1595659490239433658"
    keywordsQueryLtsLogParams:= "log"
    isCountQueryLtsLogParams:= true
    request.Body = &model.QueryLtsLogParams{
        Limit: &limitQueryLtsLogParams,
        SearchType: &searchTypeQueryLtsLogParams,
        IsDesc: &isDescQueryLtsLogParams,
        LineNum: &lineNumQueryLtsLogParams,
        Keywords: &keywordsQueryLtsLogParams,
        IsCount: &isCountQueryLtsLogParams,
        Labels: listLabelsbody,
        EndTime: "1595659500000",
        StartTime: "1595659200000",
    }
    }
    response, err := client.ListLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
    }
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 6**, **NO 7**, and **NO 8** are the target log events):

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListLogsRequest{}
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    var listLabelsbody = map[string]string{
        "hostName": "ecs-kwxtest",
    }
    limitQueryLtsLogParams:= int32(3)
    searchTypeQueryLtsLogParams:= model.GetQueryLtsLogParamsSearchTypeEnum().BACKWARDS
    isDescQueryLtsLogParams:= true
    lineNumQueryLtsLogParams:= "1595659490239433658"
    keywordsQueryLtsLogParams:= "log"
    isCountQueryLtsLogParams:= true
    request.Body = &model.QueryLtsLogParams{
        Limit: &limitQueryLtsLogParams,
        SearchType: &searchTypeQueryLtsLogParams,
        IsDesc: &isDescQueryLtsLogParams,
        LineNum: &lineNumQueryLtsLogParams,
        Keywords: &keywordsQueryLtsLogParams,
        IsCount: &isCountQueryLtsLogParams,
        Labels: listLabelsbody,
        EndTime: "1595659500000",
        StartTime: "1595659200000",
    }
    response, err := client.ListLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 8**, **NO 7**, and **NO 6** are the target log events):

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListLogsRequest{
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    var listLabelsbody = map[string]string{
        "hostName": "ecs-kwxtest",
    }
    limitQueryLtsLogParams:= int32(3)
    searchTypeQueryLtsLogParams:= model.GetQueryLtsLogParamsSearchTypeEnum().BACKWARDS
    isDescQueryLtsLogParams:= false
    lineNumQueryLtsLogParams:= "1595659490239433658"
    keywordsQueryLtsLogParams:= "log"
    isCountQueryLtsLogParams:= true
    request.Body = &model.QueryLtsLogParams{
        Limit: &limitQueryLtsLogParams,
        SearchType: &searchTypeQueryLtsLogParams,
        IsDesc: &isDescQueryLtsLogParams,
        LineNum: &lineNumQueryLtsLogParams,
        Keywords: &keywordsQueryLtsLogParams,
        IsCount: &isCountQueryLtsLogParams,
        Labels: listLabelsbody,
        EndTime: "1595659500000",
        StartTime: "1595659200000",
    }
}
response, err := client.ListLogs(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- For a pagination query (Assume that the search starts from the log event containing **NO 5**. Log events containing **NO 2**, **NO 3**, and **NO 4** are the target log events):

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
```



```
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListLogsRequest{}
request.LogGroupId = "{log_group_id}"
request.LogStreamId = "{log_stream_id}"
var listLabelsbody = map[string]string{
    "hostName": "ecs-kwxtest",
}
limitQueryLtsLogParams:= int32(3)
searchTypeQueryLtsLogParams:= model.GetQueryLtsLogParamsSearchTypeEnum().FORWARDS
isDescQueryLtsLogParams:= true
lineNumQueryLtsLogParams:= "1595659490239433658"
keywordsQueryLtsLogParams:= "log"
isCountQueryLtsLogParams:= true
request.Body = &model.QueryLtsLogParams{
    Limit: &limitQueryLtsLogParams,
    SearchType: &searchTypeQueryLtsLogParams,
    IsDesc: &isDescQueryLtsLogParams,
    LineNum: &lineNumQueryLtsLogParams,
    Keywords: &keywordsQueryLtsLogParams,
    IsCount: &isCountQueryLtsLogParams,
    Labels: listLabelsbody,
    EndTime: "1595659500000",
    StartTime: "1595659200000",
}
response, err := client.ListLogs(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- Analyze the statement query example.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    environment
    ak := os.Getenv("CLOUD_SDK_AK")
```

```

sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListLogsRequest{}
request.LogGroupId = "{log_group_id}"
request.LogStreamId = "{log_stream_id}"
isAnalysisQueryQueryLtsLogParams:= true
queryQueryLtsLogParams:= "*" | select field1,field2 from log"
request.Body = &model.QueryLtsLogParams{
    IsAnalysisQuery: &isAnalysisQueryQueryLtsLogParams,
    Query: &queryQueryLtsLogParams,
    EndTime: "1722327932801",
    StartTime: "1722324332801",
}
response, err := client.ListLogs(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
400	Bad Request: The request is invalid or the query statement is incorrect. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.4.4 Querying Structured Logs (Not Recommended)

### Function

This API is used to query structured logs in a specified log stream. (It will be brought offline on July 30, 2024.)

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/groups/{log\_group\_id}/streams/{log\_stream\_id}/structured-content/query

**Table 6-149** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-150** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-151** Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	UTC start time of the search window (in milliseconds).
end_time	Yes	String	UTC end time of the search window (in milliseconds).
sql_expression	No	String	SQL statement used for search. <b>GROUP BY</b> , <b>LIKE</b> , <b>WHERE</b> , and <b>SELECT</b> are supported. The default value is <b>SELECT *</b> . Minimum: <b>0</b> Maximum: <b>100</b>
original_content	No	Boolean	Whether raw logs are returned. The default value is <b>false</b> . Enumeration values: <ul style="list-style-type: none"><li>• <b>false</b></li></ul>

## Response Parameters

**Status code: 200**

**Table 6-152** Response body parameters

Parameter	Type	Description
struct_logs	Array of <a href="#">StructLogContents</a> objects	Log information.

**Table 6-153** StructLogContents

Parameter	Type	Description
log_content	String	Raw log data. Minimum: <b>1</b> Maximum: <b>10000</b>
line_num	String	Sequence number of a log line. Minimum: <b>19</b> Maximum: <b>19</b>

**Status code: 400**

**Table 6-154** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: • <b>LTS.0403</b>
error_msg	String	Error message. Enumeration values: • <b>Invalid projectId</b>

**Status code: 401**

**Table 6-155** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: • <b>LTS.0403</b>

Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 403**

**Table 6-156** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 500**

**Table 6-157** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

- Querying structured logs

```
POST https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/struct-content/query
```

- When **sql\_expression** is set to **\*\*select \*\*\***:

```
v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/struct-content/query
```

```
{
  "start_time" : "1595811590539",
  "end_time" : "1595811593539",
  "original_content" : "true",
```

```
"sql_expression" : "select **"
}
```

- When **sql\_expression** is set to **select count(test3), sum(test4):**

```
{
  "start_time" : "1595811590539",
  "end_time" : "1595811593539",
  "sql_expression" : "select count(test3), sum(test4)"
}
```

- When **sql\_expression** is set to **select count(test3), sum(test4) group by(test1):**

```
{
  "start_time" : "1595811590539",
  "end_time" : "1595811593539",
  "sql_expression" : "select count(test3), sum(test4) group by(test1)"
}
```

## Example Responses

**Status code: 200**

The request is successful.

- When **sql\_expression** is set to **\*\*select \*\*\*:**

```
{
  "struct_logs" : [ {
    "test4" : "151687",
    "test2" : "08:59:53",
    "test3" : "this",
    "line_num" : "1595811593539371695",
    "log_content" : "2020-07-27/08:59:53 this log is Error NO 151687",
    "test1" : "2020-07-27"
  }, {
    "test4" : "151686",
    "test2" : "08:59:52",
    "test3" : "this",
    "line_num" : "1595811592539361171",
    "log_content" : "2020-07-27/08:59:52 this log is Error NO 151686",
    "test1" : "2020-07-27"
  }, {
    "test4" : "151685",
    "test2" : "08:59:51",
    "test3" : "this",
    "line_num" : "1595811591539422860",
    "log_content" : "2020-07-27/08:59:51 this log is Error NO 151685",
    "test1" : "2020-07-27"
  }, {
    "test4" : "151684",
    "test2" : "08:59:50",
    "test3" : "this",
    "line_num" : "1595811590539454127",
    "log_content" : "2020-07-27/08:59:50 this log is Error NO 151684",
    "test1" : "2020-07-27"
  }
  ]
}
```

- When **sql\_expression** is set to **select count(test3), sum(test4):**

```
{
  "struct_logs" : [ {
    "cnt(test3)" : "4",
    "sum(test4)" : "606742.000"
  }
  ]
}
```

- When **sql\_expression** is set to **select count(test3), sum(test4) group by(test1):**

```
{
  "struct_logs": [ {
    "cnt(test3)": "4",
    "sum(test4)": "606742.000",
    "test1": "2020-07-27"
  } ]
}
```

- When `sql_expression` is set to `select count(test3), sum(test4) group by(test1):`

```
{
  "struct_logs": [ {
    "cnt(test3)": "4",
    "sum(test4)": "606742.000",
    "test1": "2020-07-27"
  } ]
}
```

**Status code: 400**

Bad Request: The request is invalid. Modify the request based on the description in `error_msg` before a retry.

```
{
  "error_code": "LTS.0009",
  "error_msg": "Failed to validate the request body"
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code": "LTS.0414",
  "error_msg": "Invalid token"
}
```

**Status code: 403**

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code": "LTS.0001",
  "error_msg": "Invalid projectId"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0202",
  "error_msg": "Failed to query lts struct log"
}
```

## SDK Sample Code

The SDK sample code is as follows.



## Java

- When **sql\_expression** is set to **\*\*select \*\***:

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListQueryStructuredLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListQueryStructuredLogsRequest request = new ListQueryStructuredLogsRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
        QueryLtsStructLogParams body = new QueryLtsStructLogParams();
        body.withOriginalContent(true);
        body.withSqlExpression("select **");
        body.withEndTime("1595811593539");
        body.withStartTime("1595811590539");
        request.withBody(body);
        try {
            ListQueryStructuredLogsResponse response = client.listQueryStructuredLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- When **sql\_expression** is set to **select count(test3), sum(test4)**:

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
```

```
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListQueryStructuredLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListQueryStructuredLogsRequest request = new ListQueryStructuredLogsRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
        QueryLtsStructLogParams body = new QueryLtsStructLogParams();
        body.withSqlExpression("select count(test3), sum(test4)");
        body.withEndTime("1595811593539");
        body.withStartTime("1595811590539");
        request.withBody(body);
        try {
            ListQueryStructuredLogsResponse response = client.listQueryStructuredLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- When **sql\_expression** is set to **select count(test3), sum(test4) group by(test1)**:

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListQueryStructuredLogsSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    LtsClient client = LtsClient.newBuilder()
        .withCredential(auth)
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();

    ListQueryStructuredLogsRequest request = new ListQueryStructuredLogsRequest();
    request.withLogGroupId("{log_group_id}");
    request.withLogStreamId("{log_stream_id}");
    QueryLtsStructLogParams body = new QueryLtsStructLogParams();
    body.withSqlExpression("select count(test3), sum(test4) group by(test1)");
    body.withEndTime("1595811593539");
    body.withStartTime("1595811590539");
    request.withBody(body);
    try {
        ListQueryStructuredLogsResponse response = client.listQueryStructuredLogs(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

## Python

- When `sql_expression` is set to `**select **`:

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)
```

```
client = LtsClient.new_builder() \  
  .with_credentials(credentials) \  
  .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
  .build()  
  
try:  
  request = ListQueryStructuredLogsRequest()  
  request.log_group_id = "{log_group_id}"  
  request.log_stream_id = "{log_stream_id}"  
  request.body = QueryLtsStructLogParams(  
    original_content=True,  
    sql_expression="select **",  
    end_time="1595811593539",  
    start_time="1595811590539"  
  )  
  response = client.list_query_structured_logs(request)  
  print(response)  
except exceptions.ClientRequestException as e:  
  print(e.status_code)  
  print(e.request_id)  
  print(e.error_code)  
  print(e.error_msg)
```

- When **sql\_expression** is set to **select count(test3), sum(test4)**:

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsklts.v2.region.lts_region import LtsRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsklts.v2 import *  
  
if __name__ == "__main__":  
  # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
  # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
  # environment variables and decrypted during use to ensure security.  
  # In this example, AK and SK are stored in environment variables for authentication. Before  
  # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
  # environment  
  ak = os.environ["CLOUD_SDK_AK"]  
  sk = os.environ["CLOUD_SDK_SK"]  
  projectId = "{project_id}"  
  
  credentials = BasicCredentials(ak, sk, projectId)  
  
  client = LtsClient.new_builder() \  
    .with_credentials(credentials) \  
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
    .build()  
  
  try:  
    request = ListQueryStructuredLogsRequest()  
    request.log_group_id = "{log_group_id}"  
    request.log_stream_id = "{log_stream_id}"  
    request.body = QueryLtsStructLogParams(  
      sql_expression="select count(test3), sum(test4)",  
      end_time="1595811593539",  
      start_time="1595811590539"  
    )  
    response = client.list_query_structured_logs(request)  
    print(response)  
  except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

- When **sql\_expression** is set to **select count(test3), sum(test4) group by(test1)**:

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListQueryStructuredLogsRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        request.body = QueryLtsStructLogParams(
            sql_expression="select count(test3), sum(test4) group by(test1)",
            end_time="1595811593539",
            start_time="1595811590539"
        )
        response = client.list_query_structured_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

- When `sql_expression` is set to `**select **`:

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
```

```
WithSk(sk).
WithProjectId(projectId).
Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListQueryStructuredLogsRequest{}
request.LogGroupId = "{log_group_id}"
request.LogStreamId = "{log_stream_id}"
originalContentQueryLtsStructLogParams:= true
sqlExpressionQueryLtsStructLogParams:= "select *"
request.Body = &model.QueryLtsStructLogParams{
    OriginalContent: &originalContentQueryLtsStructLogParams,
    SqlExpression: &sqlExpressionQueryLtsStructLogParams,
    EndTime: "1595811593539",
    StartTime: "1595811590539",
}
response, err := client.ListQueryStructuredLogs(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- When **sql\_expression** is set to **select count(test3), sum(test4)**:

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListQueryStructuredLogsRequest{}
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    sqlExpressionQueryLtsStructLogParams:= "select count(test3), sum(test4)"
    request.Body = &model.QueryLtsStructLogParams{
        SqlExpression: &sqlExpressionQueryLtsStructLogParams,
        EndTime: "1595811593539",
    }
}
```

```
    StartTime: "1595811590539",
  }
  response, err := client.ListQueryStructuredLogs(request)
  if err == nil {
    fmt.Printf("%+v\n", response)
  } else {
    fmt.Println(err)
  }
}
```

- When `sql_expression` is set to `select count(test3), sum(test4) group by(test1)`:

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListQueryStructuredLogsRequest{}
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    sqlExpressionQueryLtsStructLogParams := "select count(test3), sum(test4) group by(test1)"
    request.Body = &model.QueryLtsStructLogParams{
        SqlExpression: &sqlExpressionQueryLtsStructLogParams,
        EndTime: "1595811593539",
        StartTime: "1595811590539",
    }
    response, err := client.ListQueryStructuredLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.4.5 Querying Structured Logs (New Version)

### Function

This API is used to query structured logs in a specified log stream (new version).

#### NOTE

For details about the regions that support the new query function, see section "Log Visualization" in the *User Guide*. The number of data aggregation results does not exceed 10 billion. Only data generated in the last 30 days can be analyzed using SQL statements. To analyze data older than 30 days using SQL statements, submit a service ticket.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/streams/{log\_stream\_id}/struct-content/query



**Table 6-158** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-159** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-160** Request body parameters

Parameter	Mandatory	Type	Description
query	Yes	String	SQL statement. Minimum: <b>0</b> Maximum: <b>102400</b>

Parameter	Mandatory	Type	Description
format	Yes	String	Query result format. Only <b>k-v</b> is supported.
time_range	Yes	<b>TimeRange</b> object	Query time range.
whether_to_rows	No	Boolean	Whether the returned data format is row data. The default value is <b>false</b> .

**Table 6-161** TimeRange

Parameter	Mandatory	Type	Description
sql_time_zone	No	String	Time zone. The default value is <b>UTC</b> .
start_time	Yes	Long	UTC start time of the search window (in milliseconds).
end_time	Yes	Long	UTC end time of the search window (in milliseconds).
start_time_gt	No	Boolean	Whether the start time is included in the search window. The default value is <b>false</b> .
end_time_lt	No	Boolean	Whether the end time is included in the search window. The default value is <b>false</b> .

## Response Parameters

**Status code: 400**

**Table 6-162** Response body parameters

Parameter	Type	Description
message	<b>message</b> object	API calling message.

**Status code: 401**

**Table 6-163** Response body parameters

Parameter	Type	Description
message	<a href="#">Message401</a> object	Response message.

**Table 6-164** Message401

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0001</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>project verify error</b></li> </ul>

**Status code: 403**

**Table 6-165** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-166** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

- Querying structured logs

POST https://{endpoint}/v2/{project\_id}/streams/{log\_stream\_id}/struct-content/query

- When query is set to select \*:

```
{
  "query": "select *",
  "format": "k-v",
  "time_range": {
    "sql_time_zone": "UTC",
    "start_time": 1613806109000,
    "end_time": 1613806110000,
    "start_time_gt": false,
    "end_time_lt": false
  }
}
```

- When query is set to select count(test3) as mycount, sum(test4) as mysum:

```
{
  "query": "select count(test3) as mycount, sum(test4) as mysum",
  "format": "k-v",
  "time_range": {
    "sql_time_zone": "UTC",
    "start_time": 1613806109000,
    "end_time": 1613806110000,
    "start_time_gt": false,
    "end_time_lt": false
  }
}
```

- When query is set to select count(test3), sum(test4) group by(test1):

```
{
  "query": "select count(test3), sum(test4) group by(test1)",
  "format": "k-v",
  "time_range": {
    "sql_time_zone": "UTC",
    "start_time": 1613806109000,
    "end_time": 1613806110000,
    "start_time_gt": false,
    "end_time_lt": false
  }
}
```

- When whether\_to\_rows is set to true:

```
{
  "query": "select count(test3), sum(test4) group by(test1)",
  "format": "k-v",
  "time_range": {
    "sql_time_zone": "UTC",
    "start_time": 1613806109000,
    "end_time": 1613806110000,
    "start_time_gt": false,
    "end_time_lt": false
  },
  "whether_to_rows": true
}
```

## Example Responses

**Status code: 200**

The request is successful.

- When query is set to select \*:

```
{
  "result" : [ "system context", "global context", "global context", "system context", "system context" ]
}
```

- When query is set to select count(test3) as mycount, sum(test4) as mysum:

```
{
  "mycount" : [ 50 ],
  "mysum" : [ 7006779039596516000 ]
}
```

- When query is set to select count(test3) as mycount, sum(test4) as mysum group by(test1):

```
{
  "mycount" : [ 32, 22 ],
  "mysum" : [ -3632218674319473000, -1344225381314777000 ]
}
```

- When whether\_to\_rows is set to true:

```
{
  "result" : [ {
    "mycount" : "32",
    "mysum" : "-3632218674319473398"
  }, {
    "mycount" : "22",
    "mysum" : "-1344225381314777019"
  } ]
}
```

#### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message" : {
    "code" : "LTS.0601",
    "details" : "params validator error"
  }
}
```

#### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "message" : {
    "code" : "LTS.0001",
    "details" : "project verify error"
  }
}
```

#### Status code: 403

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

#### Status code: 500

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "Internal Server Error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- When query is set to select \*:

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListStructuredLogsWithTimeRangeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListStructuredLogsWithTimeRangeRequest request = new
        ListStructuredLogsWithTimeRangeRequest();
        request.withLogStreamId("{log_stream_id}");
        QueryLtsStructLogParamsNew body = new QueryLtsStructLogParamsNew();
        TimeRange timeRangebody = new TimeRange();
        timeRangebody.withSqlTimeZone("UTC")
            .withStartTime(1613806109000L)
            .withEndTime(1613806110000L)
            .withStartTimeGt(false)
            .withEndTimeLt(false);
        body.withTimeRange(timeRangebody);
        body.withFormat("k-v");
        body.withQuery("select *");
        request.withBody(body);
        try {
            ListStructuredLogsWithTimeRangeResponse response =
            client.listStructuredLogsWithTimeRange(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
```

```
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

- When query is set to select count(test3) as mycount, sum(test4) as mysum:

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListStructuredLogsWithTimeRangeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();

        ListStructuredLogsWithTimeRangeRequest request = new
        ListStructuredLogsWithTimeRangeRequest();
        request.withLogStreamId("{log_stream_id}");
        QueryLtsStructLogParamsNew body = new QueryLtsStructLogParamsNew();
        TimeRange timeRangebody = new TimeRange();
        timeRangebody.withSqlTimeZone("UTC")
            .withStartTime(1613806109000L)
            .withEndTime(1613806110000L)
            .withStartTimeGt(false)
            .withEndTimeLt(false);
        body.withTimeRange(timeRangebody);
        body.withFormat("k-v");
        body.withQuery("select count(test3) as mycount, sum(test4) as mysum");
        request.withBody(body);
        try {
            ListStructuredLogsWithTimeRangeResponse response =
            client.listStructuredLogsWithTimeRange(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```

```
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

- When query is set to `select count(test3), sum(test4) group by(test1):`

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListStructuredLogsWithTimeRangeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListStructuredLogsWithTimeRangeRequest request = new
        ListStructuredLogsWithTimeRangeRequest();
        request.withLogStreamId("{log_stream_id}");
        QueryLtsStructLogParamsNew body = new QueryLtsStructLogParamsNew();
        TimeRange timeRangebody = new TimeRange();
        timeRangebody.withSqlTimeZone("UTC")
            .withStartTime(1613806109000L)
            .withEndTime(1613806110000L)
            .withStartTimeGt(false)
            .withEndTimeLt(false);
        body.withTimeRange(timeRangebody);
        body.withFormat("k-v");
        body.withQuery("select count(test3), sum(test4) group by(test1)");
        request.withBody(body);
        try {
            ListStructuredLogsWithTimeRangeResponse response =
            client.listStructuredLogsWithTimeRange(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
        }
    }
}
```



```
        System.out.println(e.getErrorMsg());
    }
}
}
```

- When `whether_to_rows` is set to true:

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListStructuredLogsWithTimeRangeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();

        ListStructuredLogsWithTimeRangeRequest request = new
        ListStructuredLogsWithTimeRangeRequest();
        request.withLogStreamId("{log_stream_id}");
        QueryLtsStructLogParamsNew body = new QueryLtsStructLogParamsNew();
        TimeRange timeRangebody = new TimeRange();
        timeRangebody.withSqlTimeZone("UTC")
            .withStartTime(1613806109000L)
            .withEndTime(1613806110000L)
            .withStartTimeGt(false)
            .withEndTimeLt(false);
        body.withWhetherToRows(true);
        body.withTimeRange(timeRangebody);
        body.withFormat("k-v");
        body.withQuery("select count(test3), sum(test4) group by(test1)");
        request.withBody(body);
        try {
            ListStructuredLogsWithTimeRangeResponse response =
            client.listStructuredLogsWithTimeRange(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}
```

## Python

- When query is set to select \*:

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsklts.v2.region.lts_region import LtsRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsklts.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
    # environment variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before  
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
    # environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = LtsClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListStructuredLogsWithTimeRangeRequest()  
        request.log_stream_id = "{log_stream_id}"  
        timeRangebody = TimeRange(  
            sql_time_zone="UTC",  
            start_time=1613806109000,  
            end_time=1613806110000,  
            start_time_gt=False,  
            end_time_lt=False  
        )  
        request.body = QueryLtsStructLogParamsNew(  
            time_range=timeRangebody,  
            format="k-v",  
            query="select *"  
        )  
        response = client.list_structured_logs_with_time_range(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

- When query is set to select count(test3) as mycount, sum(test4) as mysum:

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsklts.v2.region.lts_region import LtsRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsklts.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
    # environment variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before
```

running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ListStructuredLogsWithTimeRangeRequest()
    request.log_stream_id = "{log_stream_id}"
    timeRangebody = TimeRange(
        sql_time_zone="UTC",
        start_time=1613806109000,
        end_time=1613806110000,
        start_time_gt=False,
        end_time_lt=False
    )
    request.body = QueryLtsStructLogParamsNew(
        time_range=timeRangebody,
        format="k-v",
        query="select count(test3) as mycount, sum(test4) as mysum"
    )
    response = client.list_structured_logs_with_time_range(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- When query is set to select count(test3), sum(test4) group by(test1):

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListStructuredLogsWithTimeRangeRequest()
        request.log_stream_id = "{log_stream_id}"
        timeRangebody = TimeRange(
            sql_time_zone="UTC",
            start_time=1613806109000,
            end_time=1613806110000,
```

```
        start_time_gt=False,
        end_time_lt=False
    )
    request.body = QueryLtsStructLogParamsNew(
        time_range=timeRangebody,
        format="k-v",
        query="select count(test3), sum(test4) group by(test1)"
    )
    response = client.list_structured_logs_with_time_range(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- When whether\_to\_rows is set to true:

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListStructuredLogsWithTimeRangeRequest()
        request.log_stream_id = "{log_stream_id}"
        timeRangebody = TimeRange(
            sql_time_zone="UTC",
            start_time=1613806109000,
            end_time=1613806110000,
            start_time_gt=False,
            end_time_lt=False
        )
        request.body = QueryLtsStructLogParamsNew(
            whether_to_rows=True,
            time_range=timeRangebody,
            format="k-v",
            query="select count(test3), sum(test4) group by(test1)"
        )
        response = client.list_structured_logs_with_time_range(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

- When query is set to select \*:

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListStructuredLogsWithTimeRangeRequest{}
    request.LogStreamId = "{log_stream_id}"
    sqlTimeZoneTimeRange := "UTC"
    startTimeGtTimeRange := false
    endTimeLtTimeRange := false
    timeRangebody := &model.TimeRange{
        SqlTimeZone: &sqlTimeZoneTimeRange,
        StartTime: int64(1613806109000),
        EndTime: int64(1613806110000),
        StartTimeGt: &startTimeGtTimeRange,
        EndTimeLt: &endTimeLtTimeRange,
    }
    request.Body = &model.QueryLtsStructLogParamsNew{
        TimeRange: timeRangebody,
        Format: "k-v",
        Query: "select *",
    }
    response, err := client.ListStructuredLogsWithTimeRange(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- When query is set to select count(test3) as mycount, sum(test4) as mysum:

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
)
```

```
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListStructuredLogsWithTimeRangeRequest{}
    request.LogStreamId = "{log_stream_id}"
    sqlTimeZoneTimeRange := "UTC"
    startTimeGtTimeRange := false
    endTimeLtTimeRange := false
    timeRangebody := &model.TimeRange{
        SqlTimeZone: &sqlTimeZoneTimeRange,
        StartTime: int64(1613806109000),
        EndTime: int64(1613806110000),
        StartTimeGt: &startTimeGtTimeRange,
        EndTimeLt: &endTimeLtTimeRange,
    }
    request.Body = &model.QueryLtsStructLogParamsNew{
        TimeRange: timeRangebody,
        Format: "k-v",
        Query: "select count(test3) as mycount, sum(test4) as mysum",
    }
    response, err := client.ListStructuredLogsWithTimeRange(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
}
```

- When query is set to select count(test3), sum(test4) group by(test1):

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
```

```
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListStructuredLogsWithTimeRangeRequest{}
request.LogStreamId = "{log_stream_id}"
sqlTimeZoneTimeRange:= "UTC"
startTimeGtTimeRange:= false
endTimeLtTimeRange:= false
timeRangebody := &model.TimeRange{
    SqlTimeZone: &sqlTimeZoneTimeRange,
    StartTime: int64(1613806109000),
    EndTime: int64(1613806110000),
    StartTimeGt: &startTimeGtTimeRange,
    EndTimeLt: &endTimeLtTimeRange,
}
request.Body = &model.QueryLtsStructLogParamsNew{
    TimeRange: timeRangebody,
    Format: "k-v",
    Query: "select count(test3), sum(test4) group by(test1)",
}
response, err := client.ListStructuredLogsWithTimeRange(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- When `whether_to_rows` is set to true:

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
```

```

        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build()

request := &model.ListStructuredLogsWithTimeRangeRequest{}
request.LogStreamId = "{log_stream_id}"
sqlTimeZoneTimeRange:= "UTC"
startTimeGtTimeRange:= false
endTimeLtTimeRange:= false
timeRangebody := &model.TimeRange{
    SqlTimeZone: &sqlTimeZoneTimeRange,
    StartTime: int64(1613806109000),
    EndTime: int64(1613806110000),
    StartTimeGt: &startTimeGtTimeRange,
    EndTimeLt: &endTimeLtTimeRange,
}
whetherToRowsQueryLtsStructLogParamsNew:= true
request.Body = &model.QueryLtsStructLogParamsNew{
    WhetherToRows: &whetherToRowsQueryLtsStructLogParamsNew,
    TimeRange: timeRangebody,
    Format: "k-v",
    Query: "select count(test3), sum(test4) group by(test1)",
}
response, err := client.ListStructuredLogsWithTimeRange(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).



## 6.4.6 Querying the Log Histogram

### Function

This API is used to query the distribution of reported log events that contain a specified keyword over a certain period. If no keyword is specified, the distribution of all log events reported over the period is returned.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/lts/keyword-count

**Table 6-167** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

### Request Parameters

**Table 6-168** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-169** Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Start time.
end_time	Yes	String	End time.
step_interval	Yes	Long	Time step, in milliseconds (ms). Recommended formula: $(end\_time - start\_time) / 1000 \times 1000 / 60$ , where $/1000 \times 1000$ means rounding to an integer. <b>NOTE</b> If the calculated result is less than or equal to 1000, the value 1000 is used.
group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
key_word	Yes	String	A keyword is a word between two adjacent delimiters.
is_iterative	No	Boolean	Whether the log query is iterative. The default value is <b>false</b> , indicating that the log query is not iterative. Enumeration values: <ul style="list-style-type: none"> <li><b>true</b></li> </ul>

## Response Parameters

Status code: 200

**Table 6-170** Response body parameters

Parameter	Type	Description
count	Long	Number of logs.
histogram	String	Histogram result.
isQueryComplete	Boolean	Whether the query is complete.

**Status code: 400**

**Table 6-171** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-172** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

Querying the log histogram

POST https://{endpoint}/v2/{project\_id}/lts/keyword-count

```
{
  "group_id" : "00330565-5baf-4e0d-bd16-ba0c6b951d9a",
  "stream_id" : "715cda3b-e17f-492a-a6ca-98a1ba16ad8c",
  "end_time" : 1637820813605,
  "start_time" : 1637817213605,
  "key_word" : "test",
  "step_interval" : 6000
}
```

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "count" : 1,
  "histogram" : [ {
    "num" : 1,
    "startTime" : 1637821594579,
    "endTime" : 1637821595000
  }, {
    "num" : 0,
    "startTime" : 1637821654000,
    "endTime" : 1637821654579
  }
]
```

```
    }]  
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{  
  "error_code" : "LTS.0601",  
  "error_msg" : "must be less than or equal to 86400000"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Querying the log histogram

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
public class ListLogHistogramSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        LtsClient client = LtsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListLogHistogramRequest request = new ListLogHistogramRequest();  
        QueryLogKeywordCountRequestBody body = new QueryLogKeywordCountRequestBody();  
        body.withKeyword("test");  
        body.withStreamId("715cda3b-e17f-492a-a6ca-98a1ba16ad8c");  
        body.withGroupId("00330565-5baf-4e0d-bd16-ba0c6b951d9a");  
        body.withStepInterval(6000L);  
        body.withEndTime("1637820813605");  
        body.withStartTime("1637817213605");  
        request.withBody(body);  
        try {  
            ListLogHistogramResponse response = client.listLogHistogram(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {
```

```
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Querying the log histogram

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogHistogramRequest()
        request.body = QueryLogKeywordCountRequestBody(
            key_word="test",
            stream_id="715cda3b-e17f-492a-a6ca-98a1ba16ad8c",
            group_id="00330565-5baf-4e0d-bd16-ba0c6b951d9a",
            step_interval=6000,
            end_time="1637820813605",
            start_time="1637817213605"
        )
        response = client.list_log_histogram(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Querying the log histogram

```
package main

import (
    "fmt"
```

```

"github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListLogHistogramRequest{}
    request.Body = &model.QueryLogKeywordCountRequestBody{
        Keyword: "test",
        StreamId: "715cda3b-e17f-492a-a6ca-98a1ba16ad8c",
        GroupId: "00330565-5baf-4e0d-bd16-ba0c6b951d9a",
        StepInterval: int64(6000),
        EndTime: "1637820813605",
        StartTime: "1637817213605",
    }
    response, err := client.ListLogHistogram(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The query is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.4.7 Querying Context Logs

### Function

This API is used to query logs before and after a specified log.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/groups/{log\_group\_id}/streams/{log\_stream\_id}/context

**Table 6-173** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-174** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-175** Request body parameters

Parameter	Mandatory	Type	Description
line_num	No	String	Sequence number of a log line. The field's value is a timestamp in nanoseconds, which must be obtained from the log result.
__time__	No	String	Time field of the custom time function. The field's value is a timestamp in milliseconds, which must be obtained from the log result. If the custom time function has been enabled for cloud structuring, use this field with the <b>line_num</b> field for querying log context.
backwardsSize	No	Integer	Number of logs before the start log. The value ranges from 0 to 500, and the default value is 100. Minimum: <b>0</b> Maximum: <b>500</b>



Parameter	Mandatory	Type	Description
forwardsSize	No	Integer	Number of logs after the start log. The value ranges from 0 to 500, and the default value is 100. Minimum: <b>0</b> Maximum: <b>500</b>

## Response Parameters

Status code: 200

**Table 6-176** Response body parameters

Parameter	Type	Description
logs	Array of <a href="#">LogContents</a> objects	Context log information.
total_count	Integer	Total number of returned logs, including the start log specified in the request parameters.
backwards_count	Integer	Number of logs queried forward. Minimum: <b>0</b> Maximum: <b>500</b>
forwards_count	Integer	Number of logs queried backward. Minimum: <b>0</b> Maximum: <b>500</b>
isQueryComplete	Boolean	Whether the query is complete.

**Table 6-177** LogContents

Parameter	Type	Description
content	String	Raw log data. Minimum: <b>1</b> Maximum: <b>10000</b>
line_num	String	Sequence number of a log line. Minimum: <b>19</b> Maximum: <b>19</b>

Parameter	Type	Description
labels	Map<String,String >	Labels contained in a log event. The labels vary depending on log events.

**Status code: 400**

**Table 6-178** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-179** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

- Query context logs.

```
POST https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/context
{
  "line_num" : "1725154216000000000",
  "backwardsSize" : 100,
  "forwardsSize" : 100
}
```
- Query context logs and enable the custom time function for cloud structuring.

```
POST https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/context
{
  "line_num" : "1725154216000000000",
  "time" : "1725154216000",
  "backwardsSize" : 100,
  "forwardsSize" : 100
}
```

## Example Responses

### Status code: 200

Response to the request for querying context log data succeeded.

```
{
  "total_count" : 3,
  "backwards_count" : 1,
  "forwards_count" : 2,
  "logs" : [ {
    "content" : "2024-09-01/09:30:00 this log is Error NO 1",
    "labels" : {
      "appName" : "default_appname",
      "containerName" : "CONFIG_FILE",
      "clusterName" : "CONFIG_FILE",
      "podName" : "default_procname",
      "clusterId" : "CONFIG_FILE",
      "nameSpace" : "CONFIG_FILE",
      "category" : "LTS"
    },
    "line_num" : "1725154215000000000"
  }, {
    "content" : "2024-09-01/09:30:01 this log is Error NO 1",
    "labels" : {
      "appName" : "default_appname",
      "containerName" : "CONFIG_FILE",
      "clusterName" : "CONFIG_FILE",
      "podName" : "default_procname",
      "clusterId" : "CONFIG_FILE",
      "nameSpace" : "CONFIG_FILE",
      "category" : "LTS"
    },
    "line_num" : "1725154216000000000"
  }, {
    "content" : "2024-09-01/09:30:02 this log is Error NO 1",
    "labels" : {
      "appName" : "default_appname",
      "containerName" : "CONFIG_FILE",
      "clusterName" : "CONFIG_FILE",
      "podName" : "default_procname",
      "clusterId" : "CONFIG_FILE",
      "nameSpace" : "CONFIG_FILE",
      "category" : "LTS"
    },
    "line_num" : "1725154217000000000"
  } ]
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0009",
  "error_msg" : "Failed to validate the request body"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Query context logs.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListLogContextSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListLogContextRequest request = new ListLogContextRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
        ListLogContextRequestBody body = new ListLogContextRequestBody();
        body.withForwardsSize(100);
        body.withBackwardsSize(100);
        body.withLineNum("1725154216000000000");
        request.withBody(body);
        try {
            ListLogContextResponse response = client.listLogContext(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Query context logs and enable the custom time function for cloud structuring.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;
```

```
public class ListLogContextSolution {
    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListLogContextRequest request = new ListLogContextRequest();
        request.withLogGroupId("{log_group_id}");
        request.withLogStreamId("{log_stream_id}");
        ListLogContextRequestBody body = new ListLogContextRequestBody();
        body.withForwardsSize(100);
        body.withBackwardsSize(100);
        body.withTime("1725154216000");
        body.withLineNum("1725154216000000000");
        request.withBody(body);
        try {
            ListLogContextResponse response = client.listLogContext(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

- Query context logs.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
```

```
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ListLogContextRequest()
    request.log_group_id = "{log_group_id}"
    request.log_stream_id = "{log_stream_id}"
    request.body = ListLogContextRequestBody(
        forwards_size=100,
        backwards_size=100,
        line_num="1725154216000000000"
    )
    response = client.list_log_context(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- Query context logs and enable the custom time function for cloud structuring.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogContextRequest()
        request.log_group_id = "{log_group_id}"
        request.log_stream_id = "{log_stream_id}"
        request.body = ListLogContextRequestBody(
            forwards_size=100,
            backwards_size=100,
            time_="1725154216000",
            line_num="1725154216000000000"
        )
        response = client.list_log_context(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

## Go

- Query context logs.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListLogContextRequest{}
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    forwardsSizeListLogContextRequestBody := int32(100)
    backwardsSizeListLogContextRequestBody := int32(100)
    lineNumListLogContextRequestBody := "1725154216000000000"
    request.Body = &model.ListLogContextRequestBody{
        ForwardsSize: &forwardsSizeListLogContextRequestBody,
        BackwardsSize: &backwardsSizeListLogContextRequestBody,
        LineNum: &lineNumListLogContextRequestBody,
    }
    response, err := client.ListLogContext(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Query context logs and enable the custom time function for cloud structuring.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)
```

```

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListLogContextRequest{}
    request.LogGroupId = "{log_group_id}"
    request.LogStreamId = "{log_stream_id}"
    forwardsSizeListLogContextRequestBody:= int32(100)
    backwardsSizeListLogContextRequestBody:= int32(100)
    timeListLogContextRequestBody:= "1725154216000"
    lineNumListLogContextRequestBody:= "1725154216000000000"
    request.Body = &model.ListLogContextRequestBody{
        ForwardsSize: &forwardsSizeListLogContextRequestBody,
        BackwardsSize: &backwardsSizeListLogContextRequestBody,
        Time: &timeListLogContextRequestBody,
        LineNum: &lineNumListLogContextRequestBody,
    }
    response, err := client.ListLogContext(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying context log data succeeded.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	InternalServerError. The server has received the request but encountered an internal error.



## Error Codes

See [Error Codes](#).

## 6.4.8 Removing from Favorites

### Function

Remove a log stream from favorites.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v1.0/{project\_id}/lts/favorite/{fav\_res\_id}

**Table 6-180** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
fav_res_id	Yes	String	ID of the favorited resource.

### Request Parameters

**Table 6-181** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 400**

**Table 6-182** Response body parameters

Parameter	Type	Description
message	<b>ErrorMessagebody</b> object	Error message body.

**Table 6-183** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-184** Response body parameters

Parameter	Type	Description
message	<b>ErrorMessagebody</b> object	Error message body.

**Table 6-185** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Remove a log stream from favorites.

```
/v1.0/{project_id}/lts/favorite/{fav_res_id}
```

## Example Responses

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message" : {
    "code" : "LTS.0009",
    "details" : "update favorite failed"
  }
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "message" : {
    "code" : "LTS.0203",
    "details" : "Internal Server Error"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;
```

```
public class DeletefavoriteSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeletefavoriteRequest request = new DeletefavoriteRequest();
        request.withFavResId("{fav_res_id}");
        try {
            DeletefavoriteResponse response = client.deletefavorite(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
try:
    request = DeletefavoriteRequest()
    request.fav_res_id = "{fav_res_id}"
    response = client.deletefavorite(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeletefavoriteRequest{}
    request.FavResId = "{fav_res_id}"
    response, err := client.Deletefavorite(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Removed from favorites.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.4.9 Adding a Log to Favorites

### Function

Add a log stream to favorites.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v1.0/{project\_id}/lts/favorite

**Table 6-186** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-187** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> .
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=utf8</b> .

**Table 6-188** Request body parameters

Parameter	Mandatory	Type	Description
eps_id	No	String	Enterprise project ID.
favorite_resource_id	Yes	String	Favorite resource ID.
favorite_resource_type	Yes	String	Favorite resource type.
log_group_id	Yes	String	Log group ID.
log_group_name	No	String	Log group name.
log_stream_id	Yes	String	Log stream ID.
log_stream_name	No	String	Log stream name.
is_global	Yes	Boolean	Whether global favorites are supported. This parameter must be set to <b>true</b> . Otherwise, logs cannot be added to favorites.

## Response Parameters

**Status code: 201**

**Table 6-189** Response body parameters

Parameter	Type	Description
create_time	Integer	Creation time.

Parameter	Type	Description
eps_id	String	Enterprise project ID.
favorite_resource_id	String	Favorite resource ID.
favorite_resource_type	String	Favorite resource type: <b>LOG_STREAM</b> .
log_group_id	String	Log group ID.
log_group_name	String	Log group name.
log_stream_id	String	Log stream ID.
log_stream_name	String	Log stream name.
project_id	String	Project ID.
is_global	Boolean	Whether to enable the function of adding logs to favorites.

**Status code: 400**

**Table 6-190** Response body parameters

Parameter	Type	Description
message	<b>ErrorMessagebody</b> object	Error message body.

**Table 6-191** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**



**Table 6-192** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-193** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Adding a Log to Favorites

```
/v1.0/{project_id}/lts/favorite
{
  "log_group_id" : "d91fff37-9d10-47f1-85de-c2840724908f",
  "log_group_name" : "lts-group-sgq1",
  "log_stream_id" : "f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
  "log_stream_name" : "lts-topic-xxxxtest",
  "eps_id" : "0",
  "favorite_resource_id" : "f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
  "favorite_resource_type" : "log_stream",
  "is_global" : true
}
```

## Example Responses

**Status code: 201**

A log is added to favorites.

```
{
  "create_time" : 1669018970929,
  "eps_id" : "0",
  "favorite_resource_id" : "f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
  "is_global" : true,
  "favorite_resource_type" : "LOG_STREAM",
  "log_group_id" : "d91fff37-9d10-47f1-85de-c2840724908f",
  "log_group_name" : "lts-group-sgq1",
  "log_stream_id" : "f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
  "log_stream_name" : "lts-topic-xxxxtest",
  "project_id" : "2a473356cca5487f8373be891bffc1cf"
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message" : {
    "code" : "LTS.0603",
    "details" : "group or stream not exist"
  }
}
```

#### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "message" : {
    "code" : "LTS.0203",
    "details" : "Internal Server Error"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Adding a Log to Favorites

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class CreatefavoriteSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreatefavoriteRequest request = new CreatefavoriteRequest();
        CreatefavoriteReqbody body = new CreatefavoriteReqbody();
        body.withIsGlobal(true);
        body.withLogStreamName("lts-topic-xxxxtest");
        body.withLogStreamId("f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c");
```

```
body.withLogGroupName("lts-group-sgq1");
body.withLogGroupId("d91fff37-9d10-47f1-85de-c2840724908f");
body.withFavoriteResourceType("log_stream");
body.withFavoriteResourceId("f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c");
body.withEpsId("0");
request.withBody(body);
try {
    CreatefavoriteResponse response = client.createfavorite(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Adding a Log to Favorites

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreatefavoriteRequest()
        request.body = CreatefavoriteReqbody(
            is_global=True,
            log_stream_name="lts-topic-xxxtest",
            log_stream_id="f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
            log_group_name="lts-group-sgq1",
            log_group_id="d91fff37-9d10-47f1-85de-c2840724908f",
            favorite_resource_type="log_stream",
            favorite_resource_id="f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
            eps_id="0"
        )
        response = client.createfavorite(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

## Go

### Adding a Log to Favorites

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreatefavoriteRequest{}
    logStreamNameCreatefavoriteReqbody := "lts-topic-xxxxtest"
    logGroupNameCreatefavoriteReqbody := "lts-group-sgq1"
    epsIdCreatefavoriteReqbody := "0"
    request.Body = &model.CreatefavoriteReqbody{
        IsGlobal: true,
        LogStreamName: &logStreamNameCreatefavoriteReqbody,
        LogStreamId: "f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
        LogGroupName: &logGroupNameCreatefavoriteReqbody,
        LogGroupId: "d91fff37-9d10-47f1-85de-c2840724908f",
        FavoriteResourceType: "log_stream",
        FavoriteResourceId: "f2fb0a2d-d4cd-4bc9-ac12-93c6d255883c",
        EpsId: &epsIdCreatefavoriteReqbody,
    }
    response, err := client.Createfavorite(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	A log is added to favorites.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.5 Log Ingestion

## 6.5.1 Creating a cross-account log ingestion configuration.

### Function

Creating a cross-account log ingestion configuration.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2.0/{project\_id}/lts/createAgencyAccess

**Table 6-194** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>1</b> Maximum: <b>64</b>

## Request Parameters

**Table 6-195** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=utf8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-196** Request body parameters

Parameter	Mandatory	Type	Description
preview_agency_list	Yes	Array of <a href="#">PreviewAgencyLogAccessReqBody</a> objects	Preview of the proxy list.

**Table 6-197** PreviewAgencyLogAccessReqBody

Parameter	Mandatory	Type	Description
agency_access_type	Yes	String	Log ingestion type. Enumeration values: • <b>AGENCYACCESS</b>
agency_log_access	Yes	String	Cross-account log ingestion configuration name.
log_agencyStream_name	Yes	String	Delegator log stream name.
log_agencyStream_id	Yes	String	Delegator log stream ID.
log_agencyGroup_name	Yes	String	Delegator log group name.

Parameter	Mandatory	Type	Description
log_agencyGroup_id	Yes	String	Delegator log group ID.
log_beAgencyStream_name	Yes	String	Delegatee log stream name.
log_beAgencyStream_id	Yes	String	Delegatee log stream ID.
log_beAgencyGroup_name	Yes	String	Delegatee log group name.
log_beAgencyGroup_id	Yes	String	Delegatee log group ID.
be_agency_project_id	Yes	String	Delegatee project ID.
agency_project_id	Yes	String	Delegator project ID.
agency_domain_name	Yes	String	Delegator account name.
agency_name	Yes	String	Agency name.

## Response Parameters

Status code: 201

**Table 6-198** Response body parameters

Parameter	Type	Description
[items]	Array of <a href="#">LTSAccessConfigInfoRespon200</a> objects	

**Table 6-199** LTSAccessConfigInfoRespon200

Parameter	Type	Description
access_config_id	String	Cross-account log ingestion ID.
project_id	String	Project ID.
access_config_name	String	Cross-account log ingestion name.

Parameter	Type	Description
access_config_type	Object	Cross-account log ingestion type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Agent</b></li> <li>• <b>CRD</b></li> <li>• <b>AGENCYACCESS</b></li> <li>• <b>K8S_CCE</b></li> <li>• <b>K8S_CUSTOM</b></li> <li>• <b>CLOUD_STREAM_AGENCY</b></li> </ul>
group_id	String	Log group ID.
log_group_name	String	Log group name.
log_stream_id	String	Log stream ID.
log_stream_name	String	Log stream name.
create_time	Long	Creation time.
agency_log_access	<a href="#">PreviewAgencyLogAccessReqBody</a> object	Information of the delegated ingestion.

**Table 6-200** PreviewAgencyLogAccessReqBody

Parameter	Type	Description
agency_access_type	String	Log ingestion type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>AGENCYACCESS</b></li> </ul>
agency_log_access	String	Cross-account log ingestion configuration name.
log_agencyStream_name	String	Delegator log stream name.
log_agencyStream_id	String	Delegator log stream ID.
log_agencyGroup_name	String	Delegator log group name.
log_agencyGroup_id	String	Delegator log group ID.
log_beAgencystream_name	String	Delegatee log stream name.



Parameter	Type	Description
log_beAgencystream_id	String	Delegatee log stream ID.
log_beAgencygroup_name	String	Delegatee log group name.
log_beAgencygroup_id	String	Delegatee log group ID.
be_agency_project_id	String	Delegatee project ID.
agency_project_id	String	Delegator project ID.
agency_domain_name	String	Delegator account name.
agency_name	String	Agency name.

**Status code: 400**

**Table 6-201** Response body parameters

Parameter	Type	Description
message	<b>ErrorMessagebody</b> object	Error message body.

**Table 6-202** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-203** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-204** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Creating a cross-account log ingestion configuration.

```
POST https://{endpoint}/v2.0/{project_id}/lts/createAgencyAccess
{
  "preview_agency_list": [ {
    "agency_log_access": "rule_lb30",
    "agency_access_type": "AGENCYACCESS",
    "agency_name": "wenshufeng",
    "agency_domain_name": "paas_aom_z00418070_01",
    "agency_project_id": "a0a12b069ab4491185d7cf26c3e86ada",
    "be_agency_project_id": "2a473356cca5487f8373be891bffc1cf",
    "log_agencyStream_name": "lts-topic-bug",
    "log_agencyStream_id": "beb169ff-e6e9-4bea-8e77-50afdec74071",
    "log_agencyGroup_name": "lts-group-sgq",
    "log_agencyGroup_id": "f06cbfa0-7243-4031-9380-ae0465bd3997",
    "log_beAgencystream_name": "lts-topic-ECS",
    "log_beAgencystream_id": "36ce06b0-c6bf-436d-9abe-39de86da28bb",
    "log_beAgencygroup_name": "lts-group-sgqECS",
    "log_beAgencygroup_id": "1e749063-d9f5-474f-a537-00cad4e9a108"
  } ]
}
```

## Example Responses

**Status code: 201**

The cross-account log ingestion configuration is created.

```
[ {
  "access_config_id": "e929f40e-d1cf-4d59-b656-a2995cbd3229",
  "access_config_name": "rule_lb30",
  "access_config_type": "AGENCYACCESS",
  "agency_log_access": {
    "agency_accessConfig_id": "e929f40e-d1cf-4d59-b656-a2995cbd3229",
    "agency_access_type": "AGENCYACCESS",
```

```
"agency_domain_name" : "paas_aom_z00418070_01",
"agency_log_access" : "rule_lb30",
"agency_name" : "wenshufeng",
"agency_project_id" : "a0a12b069ab4491185d7cf26c3e86ada",
"be_agency_project_id" : "2a473356cca5487f8373be891bffc1cf",
"log_agencyGroup_id" : "f06cbfa0-7243-4031-9380-ae0465bd3997",
"log_agencyGroup_name" : "lts-group-sgq",
"log_agencyStream_id" : "beb169ff-e6e9-4bea-8e77-50afdec74071",
"log_agencyStream_name" : "lts-topic-bug",
"log_beAgencygroup_id" : "1e749063-d9f5-474f-a537-00cad4e9a108",
"log_beAgencygroup_name" : "lts-group-sgqECS",
"log_beAgencystream_id" : "36ce06b0-c6bf-436d-9abe-39de86da28bb",
"log_beAgencystream_name" : "lts-topic-ECS"
},
"binary_collect" : false,
"create_time" : 1694400753168,
"group_id" : "1e749063-d9f5-474f-a537-00cad4e9a108",
"hostGroupNum" : 0,
"hostNum" : 0,
"host_group_info_list" : [ ],
"host_rule_info" : {
  "black_paths" : [ ],
  "pathType" : "host_file",
  "paths" : [ ],
  "stderr" : false,
  "stdout" : false
},
"id" : "",
"indexId" : "",
"key" : "",
"log_group_name" : "lts-group-sgqECS",
"log_split" : false,
"log_stream_id" : "36ce06b0-c6bf-436d-9abe-39de86da28bb",
"log_stream_name" : "lts-topic-ECS",
"pathNum" : 0,
"project_id" : "2a473356cca5487f8373be891bffc1cf",
>tag_list" : [ ]
}]
```

**Status code: 400**

Failed to create cross-account log ingestion configuration.

```
{
  "message" : {
    "code" : "LTS.0420",
    "details" : "Agency not existed, check domain name and agency name"
  }
}
```

**Status code: 500**

Internal service error.

```
{
  "message" : {
    "code" : "LTS.0010",
    "details" : "The system encountered an internal error"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a cross-account log ingestion configuration.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateAgencyAccessSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateAgencyAccessRequest request = new CreateAgencyAccessRequest();
        PreviewAgencyLogAccessReqListBody body = new PreviewAgencyLogAccessReqListBody();
        List<PreviewAgencyLogAccessReqBody> listbodyPreviewAgencyList = new ArrayList<>();
        listbodyPreviewAgencyList.add(
            new PreviewAgencyLogAccessReqBody()
                .withAgencyAccessType(PreviewAgencyLogAccessReqBody.AgencyAccessTypeEnum.fromValue("A
GENYACCESS"))
                .withAgencyLogAccess("rule_lb30")
                .withLogAgencyStreamName("lts-topic-bug")
                .withLogAgencyStreamId("beb169ff-e6e9-4bea-8e77-50afdec74071")
                .withLogAgencyGroupName("lts-group-sgq")
                .withLogAgencyGroupId("f06cbfa0-7243-4031-9380-ae0465bd3997")
                .withLogBeAgencystreamName("lts-topic-ECS")
                .withLogBeAgencystreamId("36ce06b0-c6bf-436d-9abe-39de86da28bb")
                .withLogBeAgencygroupName("lts-group-sgqECS")
                .withLogBeAgencygroupId("1e749063-d9f5-474f-a537-00cad4e9a108")
                .withBeAgencyProjectId("2a473356cca5487f8373be891bffc1cf")
                .withAgencyProjectId("a0a12b069ab4491185d7cf26c3e86ada")
                .withAgencyDomainName("paas_aom_z00418070_01")
                .withAgencyName("wenshufeng")
            );
        body.withPreviewAgencyList(listbodyPreviewAgencyList);
        request.withBody(body);
        try {
            CreateAgencyAccessResponse response = client.createAgencyAccess(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
        }
    }
}
```

```
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

Creating a cross-account log ingestion configuration.

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateAgencyAccessRequest()
        listPreviewAgencyListbody = [
            PreviewAgencyLogAccessReqBody(
                agency_access_type="AGENCYACCESS",
                agency_log_access="rule_lb30",
                log_agency_stream_name="lts-topic-bug",
                log_agency_stream_id="beb169ff-e6e9-4bea-8e77-50afdec74071",
                log_agency_group_name="lts-group-sgq",
                log_agency_group_id="f06cbfa0-7243-4031-9380-ae0465bd3997",
                log_be_agencystream_name="lts-topic-ECS",
                log_be_agencystream_id="36ce06b0-c6bf-436d-9abe-39de86da28bb",
                log_be_agencygroup_name="lts-group-sgqECS",
                log_be_agencygroup_id="1e749063-d9f5-474f-a537-00cad4e9a108",
                be_agency_project_id="2a473356cca5487f8373be891bffc1cf",
                agency_project_id="a0a12b069ab4491185d7cf26c3e86ada",
                agency_domain_name="paas_aom_z00418070_01",
                agency_name="wenshufeng"
            )
        ]
        request.body = PreviewAgencyLogAccessReqListBody(
            preview_agency_list=listPreviewAgencyListbody
        )
        response = client.create_agency_access(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Creating a cross-account log ingestion configuration.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateAgencyAccessRequest{}
    var listPreviewAgencyListbody = []model.PreviewAgencyLogAccessReqBody{
        {
            AgencyAccessType:
model.GetPreviewAgencyLogAccessReqBodyAgencyAccessTypeEnum().AGENCYACCESS,
            AgencyLogAccess: "rule_lb30",
            LogAgencyStreamName: "lts-topic-bug",
            LogAgencyStreamId: "beb169ff-e6e9-4bea-8e77-50afdec74071",
            LogAgencyGroupName: "lts-group-sgq",
            LogAgencyGroupId: "f06cbfa0-7243-4031-9380-ae0465bd3997",
            LogBeAgencystreamName: "lts-topic-ECS",
            LogBeAgencystreamId: "36ce06b0-c6bf-436d-9abe-39de86da28bb",
            LogBeAgencygroupName: "lts-group-sgqECS",
            LogBeAgencygroupId: "1e749063-d9f5-474f-a537-00cad4e9a108",
            BeAgencyProjectId: "2a473356cca5487f8373be891bffc1cf",
            AgencyProjectId: "a0a12b069ab4491185d7cf26c3e86ada",
            AgencyDomainName: "paas_aom_z00418070_01",
            AgencyName: "wenshufeng",
        },
    }
    request.Body = &model.PreviewAgencyLogAccessReqListBody{
        PreviewAgencyList: listPreviewAgencyListbody,
    }
    response, err := client.CreateAgencyAccess(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The cross-account log ingestion configuration is created.
400	Failed to create cross-account log ingestion configuration.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 6.5.2 Querying Log Ingestion Configurations

### Function

This API is used to query log ingestion configurations in LTS.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v3/{project\_id}/lts/access-config-list

**Table 6-205** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Account ID, Project Resource Set ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-206** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-207** Request body parameters

Parameter	Mandatory	Type	Description
access_config_name_list	No	Array of strings	List of ingestion configuration names. Minimum: <b>1</b> Maximum: <b>64</b>
host_group_name_list	No	Array of strings	List of host group names. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_name_list	No	Array of strings	List of log group names. Minimum: <b>1</b> Maximum: <b>64</b>
log_stream_name_list	No	Array of strings	List of log stream names. Minimum: <b>1</b> Maximum: <b>64</b>
access_config_tag_list	No	Array of <a href="#">accessConfigTag</a> objects	Ingestion configuration tags. A tag key must be unique. Up to 20 tags are supported.



**Table 6-208** accessConfigTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	No	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

## Response Parameters

Status code: 200

**Table 6-209** Response body parameters

Parameter	Type	Description
result	Array of <a href="#">AccessConfigInfo</a> objects	Ingestion configuration list.
total	Long	Total number of ingestion configurations. Minimum: <b>0</b> Maximum: <b>1000</b>

**Table 6-210** AccessConfigInfo

Parameter	Type	Description
access_config_id	String	Ingestion configuration ID. Minimum: <b>36</b> Maximum: <b>36</b>
access_config_name	String	Ingestion configuration name. Minimum: <b>1</b> Maximum: <b>64</b>
access_config_type	String	Ingestion configuration type. The value <b>AGENT</b> indicates host log ingestion. Enumeration values: <ul style="list-style-type: none"> <li><b>AGENT</b></li> </ul>

Parameter	Type	Description
create_time	Long	Creation time. Minimum: <b>1</b> Maximum: <b>999999999999999</b>
access_config_detail	<a href="#">AccessConfigDetailCreate</a> object	Ingestion configuration details.
log_info	<a href="#">AccessConfigQueryLogInfo</a> object	Log details.
host_group_info	<a href="#">AccessConfigHostGroupIdList</a> object	Host group ID list.
access_config_tag	Array of <a href="#">accessConfigTag</a> objects	Tag information. A tag key must be unique. Up to 20 tags are supported.
log_split	Boolean	Log splitting.
binary_collect	Boolean	Binary collection.
cluster_id	String	CCE cluster ID
encoding_format	String	Encoding format. The default format is UTF-8.
incremental_collect	Boolean	Collection policy. The value can be incremental or full.
processor_type	String	IC structuring parsing type.
demo_log	String	Example log.
demo_fields	Array of <a href="#">DemoFieldAccess</a> objects	Example log parsing field.
processors	Array of <a href="#">Processor</a> objects	IC structuring parser.
application_id	String	ServiceStage application ID.
environment_id	String	ServiceStage environment ID.
component_id	Array of strings	ServiceStage component ID.

**Table 6-211** AccessConfigDeatilCreate

Parameter	Type	Description
paths	Array of strings	<p>Collection paths.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>The container path and host path are mandatory for the CCE type and are not mandatory for the standard output.</p> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>1 - 9</b></p>
black_paths	Array of strings	<p>Collection path blacklist.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>0 - 9</b></p>
format	<a href="#">AccessConfigFormatCreate</a> object	Log format. Set it to either <b>single</b> or <b>multi</b> .
windows_log_info	<a href="#">AccessConfigWindowsLogInfoCreate</a> object	Windows event logs.
stdout	Boolean	Standard output switch. This parameter is used only when logs are collected from CCE.
stderr	Boolean	Standard error switch. This parameter is used only when logs are collected from CCE.

Parameter	Type	Description
pathType	String	Log collection from CCE. This parameter is used only when logs are collected from CCE. Enumeration values: <ul style="list-style-type: none"> <li>• <b>HOST_FILE</b></li> <li>• <b>CONTAINER_STDOUT</b></li> <li>• <b>CONTAINER_FILE</b></li> </ul>
namespaceRegex	String	Regular expression matching of Kubernetes namespaces. This parameter is used only when logs are collected from CCE.
podNameRegex	String	Regular expression matching of Kubernetes pods. This parameter is used only when logs are collected from CCE.
containerNameRegex	String	Regular expression matching of Kubernetes container names. This parameter is used only when logs are collected from CCE.
includeLabels	Map<String,String>	Container label trustlist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeLabels	Map<String,String>	Container label blacklist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
includeEnvs	Map<String,String>	Environment variable trustlist. A maximum of 30 environment variable whitelists can be created. Key names must be unique. This parameter is used only when logs are collected from CCE.
excludeEnvs	Map<String,String>	Environment variable blacklist. A maximum of 30 environment variables can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.

Parameter	Type	Description
logLabels	Map<String,String >	Container label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logEnvs	Map<String,String >	Environment variable log tag. A maximum of 30 tags can be created. The key name must be unique. This parameter is used only when logs are collected from CCE.
includeK8sLabels	Map<String,String >	Kubernetes label trustlist. A maximum of 30 whitelists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeK8sLabels	Map<String,String >	Kubernetes label blacklist. A maximum of 30 blocklists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logK8s	Map<String,String >	Kubernetes label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
repeat_collect	Boolean	Forcible repeated collection.

Parameter	Type	Description
system_fields	Array of strings	<p>System built-in fields. When configuring a log ingestion rule, you can specify system fields to include in the tag data of each log reported.</p> <p>The system fields for host log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>category</b>, <b>collectTime</b>, and <b>__host_group__</b>.</p> <p>The system fields for Kubernetes cluster container log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>clusterId</b>, <b>podName</b>, <b>appName</b>, <b>containerName</b>, <b>namespace</b>, <b>category</b>, <b>collectTime</b>, <b>__host_group__</b>, <b>serviceID</b>, <b>podIp</b>, <b>clusterName</b>, <b>workloadType</b>, and <b>__image_name__</b>.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p> <p>When you configure metadata for the first time, this parameter is mandatory. In this case, <b>["pathFile"]</b> must be entered and other fields are optional.</p>
custom_key_value	Map<String,String >	<p>Custom key-value pairs. When configuring a log ingestion rule, you can configure up to 20 custom key-value pairs to include in the tag data of each log reported.</p> <p>A key can contain up to 128 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>A value can contain up to 1,024 characters.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p>
includeLabelsLogical	String	<p>Logic for the container label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.</p>

Parameter	Type	Description
excludeLabelsLogical	String	Logic for the container label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeK8sLabelsLogical	String	Logic for the Kubernetes label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeK8sLabelsLogical	String	Logic for the Kubernetes label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeEnvsLogical	String	Logic for the environment variable whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeEnvsLogical	String	Logic for the environment variable blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.

**Table 6-212** AccessConfigFormatCreate

Parameter	Type	Description
single	<a href="#">AccessConfigFormatSingleCreate</a> object	Single-line logs.
multi	<a href="#">AccessConfigFormatMutilCreate</a> object	Multi-line logs.

**Table 6-213** AccessConfigFormatSingleCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>system</b> indicates the system time, whereas <b>wildcard</b> indicates the time wildcard. Enumeration values: <ul style="list-style-type: none"> <li>• <b>system</b></li> <li>• <b>wildcard</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>system</b> , the value is the current timestamp.If <b>mode</b> is <b>wildcard</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>



**Table 6-214** AccessConfigFormatMutilCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>time</b> indicates a time wildcard is used to detect log boundaries, whereas <b>regular</b> indicates that a regular expression is used. Enumeration values: <ul style="list-style-type: none"> <li>• <b>time</b></li> <li>• <b>regular</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>regular</b> , the value is a regular expression.If <b>mode</b> is <b>time</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-215** AccessConfigWindowsLogInfoCreate

Parameter	Type	Description
categorys	Array of strings	The type of Windows event logs to be collected. <b>Application</b> : application system; <b>System</b> : system; <b>Security</b> : security; <b>Setup</b> : startup Enumeration values: <ul style="list-style-type: none"> <li>• <b>Application</b></li> <li>• <b>System</b></li> <li>• <b>Security</b></li> <li>• <b>Setup</b></li> </ul>
time_offset	<a href="#">AccessConfigTimeOffset</a> object	Time offset.

Parameter	Type	Description
event_level	Array of strings	Event level. information, warning, error, critical, verbose. Array Length: <b>1 - 5</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>information</b></li> <li>• <b>warning</b></li> <li>• <b>error</b></li> <li>• <b>critical</b></li> <li>• <b>verbose</b></li> </ul>

**Table 6-216** AccessConfigTimeOffset

Parameter	Type	Description
offset	Long	Time offset. When <b>unit</b> is <b>day</b> , the value ranges from <b>1</b> to <b>7</b> . When <b>unit</b> is <b>hour</b> , the value ranges from <b>1</b> to <b>168</b> . When <b>unit</b> is <b>sec</b> , the value ranges from <b>1</b> to <b>604800</b> . Minimum: <b>1</b> Maximum: <b>604800</b>
unit	String	Unit of the time offset. day, hour, sec. Enumeration values: <ul style="list-style-type: none"> <li>• <b>day</b></li> <li>• <b>hour</b></li> <li>• <b>sec</b></li> </ul>

**Table 6-217** AccessConfigQueryLogInfo

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>128</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>128</b>

**Table 6-218** AccessConfigHostGroupIdList

Parameter	Type	Description
host_group_id_list	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-219** accessConfigTag

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

**Table 6-220** DemoFieldAccess

Parameter	Type	Description
field_name	String	Field name, which must be the same as that in keys.
field_value	String	Field value.

**Table 6-221** Processor

Parameter	Type	Description
type	String	Parser type. The value can be <b>processor_regex</b> (regular expression), <b>processor_split_string</b> (delimiter), <b>processor_json</b> (JSON parser), <b>processor_gotime</b> (custom time type), <b>processor_filter_regex</b> (log filtering), <b>processor_drop</b> (type of a deleted field), and <b>processor_rename</b> (type of a deleted field).
detail	<b>Detail</b> object	Parser configuration.

**Table 6-222** Detail

Parameter	Type	Description
source_key	String	Custom time key field name.
regex	String	Regular expression for parsing. This field is required for a single-line completely regular expression or a multi-line completely regular expression.
keys	Array of strings	Field name list, which is consistent with the field_name field.
multi_line_regex	String	First line regular expression.
keep_source	Boolean	Whether to upload raw logs.
keep_source_if_parse_error	Boolean	Whether to upload logs that fail to be parsed.
split_sep	String	Delimiter. The maximum length of a custom delimiter is 10 characters, and the maximum length of a custom string is 30 characters.
split_type	String	Delimiter type. The value can be <b>char</b> (custom character), <b>special_char</b> (invisible character), or <b>string</b> (custom string).
fields	Map<String,String>	List of added fields, in format.
drop_keys	Array of strings	List of deleted fields.
source_keys	Array of strings	List of source field names for renaming fields.

Parameter	Type	Description
dest_keys	Array of strings	List of field names that are renamed and replaced.
expand_depth	Integer	JSON parsing depth. The value ranges from <b>1</b> (default) to <b>4</b> .
expand_connector	String	JSON parsing field name connector.
source_format	String	Custom time format.
source_value	String	Custom time field value.
set_time	Boolean	Whether to enable the custom time function.
include	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.
exclude	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.

**Status code: 400**

**Table 6-223** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**

**Table 6-224** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

Log ingestion configurations are filtered by the request body.

```
POST https://{endpoint}/v3/{project_id}/lts/access-config-list
{
  "access_config_name_list": [ "Collectionxx2", "22x", "2x", "CollectionWjxxxx" ],
  "host_group_name_list": [ "wwxx" ],
  "log_group_name_list": [ "lts-grxx", "lts-xx", "lts-gxx" ],
  "log_stream_name_list": [ "lts-topixx", "lts-txx" ],
  "access_config_tag_list": [ {
    "key": "xxx",
    "value": "xxx"
  }, {
    "key": "xxx1",
    "value": "xxx1"
  } ]
}
```

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "result": [ {
    "access_config_detail": {
      "containerNameRegex": "my",
      "excludeEnvs": {
        "h": "8"
      },
      "excludeK8sLabels": {
        "e": "5"
      },
      "excludeLabels": {
        "b": "2"
      },
      "format": {
        "single": {
          "mode": "system",
          "value": "1678969382000"
        }
      }
    },
    "includeEnvs": {
      "g": "7"
    },
    "includeK8sLabels": {
```

```

    "d30" : "4"
  },
  "includeLabels" : {
    "a" : "1"
  },
  "logEnvs" : {
    "i" : "9"
  },
  "logK8s" : {
    "f" : "6"
  },
  "logLabels" : {
    "c" : "3"
  },
  "namespaceRegex" : "default",
  "pathType" : "container_stdout",
  "paths" : [ ],
  "podNameRegex" : "abc",
  "stderr" : false,
  "stdout" : true
},
"access_config_id" : "c3152f88-8b06-4f7f-bbbe-129512f49f87",
"access_config_name" : "myapinew322",
"access_config_tag" : [ {
  "key" : "my01",
  "value" : "001"
}, {
  "key" : "my02",
  "value" : "002"
} ],
"access_config_type" : "K8S_CCE",
"binary_collect" : false,
"create_time" : 1684467787996,
"host_group_info" : {
  "host_group_id_list" : [ "12b0bbd1-4eda-456b-a641-647aa66bdeab" ]
},
"log_info" : {
  "log_group_id" : "9575cb24-290c-478e-a5db-88d6d1dc513b",
  "log_group_name" : "my-group",
  "log_stream_id" : "3581bee9-8698-476e-a0ba-b0f310ed99cf",
  "log_stream_name" : "lts-topic-api"
},
"log_split" : false
}, {
  "access_config_detail" : {
    "containerNameRegex" : "my",
    "excludeEnvs" : {
      "h" : "8"
    },
    "excludeK8sLabels" : {
      "e" : "5"
    },
    "excludeLabels" : {
      "b" : "2"
    },
    "format" : {
      "single" : {
        "mode" : "system",
        "value" : "1678969382000"
      }
    },
    "includeEnvs" : {
      "g" : "7"
    },
    "includeK8sLabels" : {
      "d10" : "4",
      "d" : "4",
      "d12" : "4",
      "d11" : "4",

```

```
"d14" : "4",
"d13" : "4",
"d16" : "4",
"d15" : "4",
"d18" : "4",
"d17" : "4",
"d1" : "4",
"d2" : "4",
"d3" : "4",
"d4" : "4",
"d5" : "4",
"d6" : "4",
"d7" : "4",
"d8" : "4",
"d9" : "4"
},
"includeLabels" : {
  "a" : "1"
},
"logEnvs" : {
  "i" : "9"
},
"logK8s" : {
  "f" : "6"
},
"logLabels" : {
  "c" : "3"
},
"namespaceRegex" : "default",
"pathType" : "container_stdout",
"paths" : [ ],
"podNameRegex" : "abc",
"stderr" : false,
"stdout" : true
},
"access_config_id" : "550cd738-7b16-4724-9c59-aba61bf16528",
"access_config_name" : "myapinew32",
"access_config_tag" : [ {
  "key" : "my01",
  "value" : "001"
}, {
  "key" : "my02",
  "value" : "002"
} ],
"access_config_type" : "K8S_CCE",
"binary_collect" : false,
"create_time" : 1684463134956,
"host_group_info" : {
  "host_group_id_list" : [ "12b0bbd1-4eda-456b-a641-647aa66bdeab" ]
},
"log_info" : {
  "log_group_id" : "9575cb24-290c-478e-a5db-88d6d1dc513b",
  "log_group_name" : "my-group",
  "log_stream_id" : "3581bee9-8698-476e-a0ba-b0f310ed99cf",
  "log_stream_name" : "lts-topic-api"
},
"log_split" : false
} ],
"total" : 2
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.1807",
  "error_msg" : "Invalid access config name"
}
```



**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

**SDK Sample Code**

The SDK sample code is as follows.

**Java**

Log ingestion configurations are filtered by the request body.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListAccessConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListAccessConfigRequest request = new ListAccessConfigRequest();
        GetAccessConfigListRequestBody body = new GetAccessConfigListRequestBody();
        List<AccessConfigTag> listbodyAccessConfigTagList = new ArrayList<>();
        listbodyAccessConfigTagList.add(
            new AccessConfigTag()
                .withKey("xxx")
                .withValue("xxx")
        );
        listbodyAccessConfigTagList.add(
            new AccessConfigTag()
                .withKey("xxx1")
                .withValue("xxx1")
        );
        List<String> listbodyLogStreamNameList = new ArrayList<>();
        listbodyLogStreamNameList.add("lts-topixx");
```

```
listbodyLogStreamNameList.add("lts-txx");
List<String> listbodyLogGroupNameList = new ArrayList<>();
listbodyLogGroupNameList.add("lts-grxx");
listbodyLogGroupNameList.add("lts-xx");
listbodyLogGroupNameList.add("lts-gxx");
List<String> listbodyHostGroupNameList = new ArrayList<>();
listbodyHostGroupNameList.add("wwwxx");
List<String> listbodyAccessConfigNameList = new ArrayList<>();
listbodyAccessConfigNameList.add("Collectionxx2");
listbodyAccessConfigNameList.add("22x");
listbodyAccessConfigNameList.add("2x");
listbodyAccessConfigNameList.add("CollectionWjxxxx");
body.withAccessConfigTagList(listbodyAccessConfigTagList);
body.withLogStreamNameList(listbodyLogStreamNameList);
body.withLogGroupNameList(listbodyLogGroupNameList);
body.withHostGroupNameList(listbodyHostGroupNameList);
body.withAccessConfigNameList(listbodyAccessConfigNameList);
request.withBody(body);
try {
    ListAccessConfigResponse response = client.listAccessConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Log ingestion configurations are filtered by the request body.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAccessConfigRequest()
        listAccessConfigTagListbody = [
            AccessConfigTag(
                key="xxx",
```

```
        value="xxx"
    ),
    AccessConfigTag(
        key="xxx1",
        value="xxx1"
    )
]
listLogStreamNameListbody = [
    "lts-topixx",
    "lts-txx"
]
listLogGroupNameListbody = [
    "lts-grxx",
    "lts-xx",
    "lts-gxx"
]
listHostGroupNameListbody = [
    "wwwxx"
]
listAccessConfigNameListbody = [
    "Collectionxx2",
    "22x",
    "2x",
    "CollectionWjxxxx"
]
request.body = GetAccessConfigListRequestBody(
    access_config_tag_list=listAccessConfigTagListbody,
    log_stream_name_list=listLogStreamNameListbody,
    log_group_name_list=listLogGroupNameListbody,
    host_group_name_list=listHostGroupNameListbody,
    access_config_name_list=listAccessConfigNameListbody
)
response = client.list_access_config(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

Log ingestion configurations are filtered by the request body.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()
}
```

```
client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListAccessConfigRequest{
    keyAccessConfigTagList:= "xxx"
    valueAccessConfigTagList:= "xxx"
    keyAccessConfigTagList1:= "xxx1"
    valueAccessConfigTagList1:= "xxx1"
    var listAccessConfigTagListbody = []model.AccessConfigTag{
        {
            Key: &keyAccessConfigTagList,
            Value: &valueAccessConfigTagList,
        },
        {
            Key: &keyAccessConfigTagList1,
            Value: &valueAccessConfigTagList1,
        },
    }
    var listLogStreamNameListbody = []string{
        "lts-topixx",
        "lts-txx",
    }
    var listLogGroupNameListbody = []string{
        "lts-grxx",
        "lts-xx",
        "lts-gxx",
    }
    var listHostGroupNameListbody = []string{
        "wwxx",
    }
    var listAccessConfigNameListbody = []string{
        "Collectionxx2",
        "22x",
        "2x",
        "CollectionWjxxxx",
    }
    request.Body = &model.GetAccessConfigListRequestBody{
        AccessConfigTagList: &listAccessConfigTagListbody,
        LogStreamNameList: &listLogStreamNameListbody,
        LogGroupNameList: &listLogGroupNameListbody,
        HostGroupNameList: &listHostGroupNameListbody,
        AccessConfigNameList: &listAccessConfigNameListbody,
    }
    response, err := client.ListAccessConfig(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The query is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.5.3 Creating a Log Ingestion Configuration

### Function

This API is used to create a log ingestion configuration.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v3/{project\_id}/lts/access-config

**Table 6-225** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Account Tenant ID, Project Resource Set ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-226** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-227** Request body parameters

Parameter	Mandatory	Type	Description
access_config_name	Yes	String	Ingestion configuration name. It should match the regular expression: $^(?!)(?!)(?!.*$.)[\u4e00- \u9fa5a-zA-Z0-9-.\]{1,64}$$ . Minimum: <b>1</b> Maximum: <b>64</b>
access_config_type	Yes	String	Ingestion configuration type. <b>AGENT</b> : ECS access; <b>K8S_CCE</b> : CCE access Enumeration values: <ul style="list-style-type: none"> <li>• <b>AGENT</b></li> <li>• <b>K8S_CCE</b></li> </ul>
access_config_detail	Yes	<a href="#">AccessConfigDetailCreate</a> object	Access configuration details.
log_info	Yes	<a href="#">AccessConfigBaseLogInfoCreate</a> object	Log information

Parameter	Mandatory	Type	Description
host_group_info	No	<a href="#">AccessConfig</a> <a href="#">HostGroupId</a> <a href="#">ListCreate</a> object	Host group information
access_config_tag	No	Array of <a href="#">accessConfig</a> <a href="#">Tag</a> objects	Tag information. A tag key must be unique. Up to 20 tags are supported.
binary_collect	No	Boolean	Binary collection.
log_split	No	Boolean	Log splitting.
cluster_id	No	String	Cluster ID
incremental_collect	No	Boolean	Whether to perform incremental collection. <b>true</b> indicates incremental collection and <b>false</b> indicates full collection.
encoding_format	No	String	Encoding format. The value can be <b>UTF-8</b> (default) or <b>GBK</b> .
processor_type	No	String	IC structuring parsing type. The value can be <b>SINGLE_LINE</b> (single-line full-text), <b>MULTI_LINE</b> (multi-line full-text), <b>REGEX</b> (single-line regular expression), <b>MULTI_REGEX</b> (multi-line regular expression), <b>SPLIT</b> (delimiter), <b>JSON</b> (JSON parsing), <b>NGINX</b> (Nginx parsing), and <b>COMPOSE</b> (combined parsing).
demo_log	No	String	Example log.
demo_fields	No	Array of <a href="#">DemoFieldAccess</a> objects	Example log parsing field.
processors	No	Array of <a href="#">Processor</a> objects	IC structuring parser.
application_id	No	String	ServiceStage application ID.
environment_id	No	String	ServiceStage environment ID.

Parameter	Mandatory	Type	Description
component_id	No	Array of strings	ServiceStage component ID.
access_config_type_source	No	String	Self-built software source of log ingestion.

**Table 6-228** AccessConfigDeatilCreate

Parameter	Mandatory	Type	Description
paths	No	Array of strings	<p>Collection paths.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>The container path and host path are mandatory for the CCE type and are not mandatory for the standard output.</p> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>1 - 9</b></p>



Parameter	Mandatory	Type	Description
black_paths	No	Array of strings	<p>Collection path blacklist.</p> <ol style="list-style-type: none"> <li>The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt; ".</li> <li>A path cannot start with /** or /*.</li> <li>Only one double asterisk (**) can be contained in a path.</li> </ol> <p>Minimum: 1 Maximum: 128 Array Length: 0 - 9</p>
format	Yes	<a href="#">AccessConfigFormatCreate</a> object	Log format. Set it to either <b>single</b> or <b>multi</b> .
windows_log_info	No	<a href="#">AccessConfigWindowsLogInfoCreate</a> object	Windows event logs.
stdout	No	Boolean	Standard output switch. This parameter is used only when logs are collected from CCE.
stderr	No	Boolean	Standard error switch. This parameter is used only when logs are collected from CCE.
pathType	No	String	<p>Log collection from CCE. This parameter is used only when logs are collected from CCE.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li><b>HOST_FILE</b></li> <li><b>CONTAINER_STDOUT</b></li> <li><b>CONTAINER_FILE</b></li> </ul>
namespaceRegex	No	String	Regular expression matching of Kubernetes namespaces. This parameter is used only when logs are collected from CCE.

Parameter	Mandatory	Type	Description
podNameRegex	No	String	Regular expression matching of Kubernetes pods. This parameter is used only when logs are collected from CCE.
containerNameRegex	No	String	Regular expression matching of Kubernetes container names. This parameter is used only when logs are collected from CCE.
includeLabels	No	Map<String,String>	Container label trustlist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeLabels	No	Map<String,String>	Container label blacklist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
includeEnvs	No	Map<String,String>	Environment variable trustlist. A maximum of 30 environment variable whitelists can be created. Key names must be unique. This parameter is used only when logs are collected from CCE.
excludeEnvs	No	Map<String,String>	Environment variable blacklist. A maximum of 30 environment variables can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logLabels	No	Map<String,String>	Container label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.

Parameter	Mandatory	Type	Description
logEnvs	No	Map<String,String>	Environment variable log tag. A maximum of 30 tags can be created. The key name must be unique. This parameter is used only when logs are collected from CCE.
includeK8sLabels	No	Map<String,String>	Kubernetes label trustlist. A maximum of 30 whitelists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeK8sLabels	No	Map<String,String>	Kubernetes label blocklist. A maximum of 30 blocklists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logK8s	No	Map<String,String>	Kubernetes label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
repeat_collect	No	Boolean	Forcible repeated collection.

Parameter	Mandatory	Type	Description
system_fields	No	Array of strings	<p>System built-in fields. When configuring a log ingestion rule, you can specify system fields to include in the tag data of each log reported.</p> <p>The system fields for host log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>category</b>, <b>collectTime</b>, and <b>__host_group__</b>.</p> <p>The system fields for Kubernetes cluster container log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>clusterId</b>, <b>podName</b>, <b>appName</b>, <b>containerName</b>, <b>nameSpace</b>, <b>category</b>, <b>collectTime</b>, <b>__host_group__</b>, <b>serviceID</b>, <b>podIp</b>, <b>clusterName</b>, <b>workloadType</b>, and <b>__image_name__</b>.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p> <p>When you configure metadata for the first time, this parameter is mandatory. In this case, <b>["pathFile"]</b> must be entered and other fields are optional.</p>
custom_key_value	No	Map<String,String>	<p>Custom key-value pairs. When configuring a log ingestion rule, you can configure up to 20 custom key-value pairs to include in the tag data of each log reported.</p> <p>A key can contain up to 128 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>A value can contain up to 1,024 characters.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p>

Parameter	Mandatory	Type	Description
includeLabelsLogical	No	String	Logic for the container label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeLabelsLogical	No	String	Logic for the container label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeK8sLabelsLogical	No	String	Logic for the Kubernetes label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeK8sLabelsLogical	No	String	Logic for the Kubernetes label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.

Parameter	Mandatory	Type	Description
includeEnvsLogical	No	String	Logic for the environment variable whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeEnvsLogical	No	String	Logic for the environment variable blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.

**Table 6-229** AccessConfigFormatCreate

Parameter	Mandatory	Type	Description
single	No	<a href="#">AccessConfigFormatSingleCreate</a> object	Single-line logs.
multi	No	<a href="#">AccessConfigFormatMutilCreate</a> object	Multi-line logs.

**Table 6-230** AccessConfigFormatSingleCreate

Parameter	Mandatory	Type	Description
mode	No	String	Single-line logs. <b>system</b> indicates the system time, whereas <b>wildcard</b> indicates the time wildcard. Enumeration values: <ul style="list-style-type: none"> <li>• <b>system</b></li> <li>• <b>wildcard</b></li> </ul>
value	No	String	Log time.If <b>mode</b> is <b>system</b> , the value is the current timestamp.If <b>mode</b> is <b>wildcard</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: 1 Maximum: <b>64</b>

**Table 6-231** AccessConfigFormatMutilCreate

Parameter	Mandatory	Type	Description
mode	No	String	Single-line logs. <b>time</b> indicates a time wildcard is used to detect log boundaries, whereas <b>regular</b> indicates that a regular expression is used. Enumeration values: <ul style="list-style-type: none"> <li>• <b>time</b></li> <li>• <b>regular</b></li> </ul>

Parameter	Mandatory	Type	Description
value	No	String	Log time.If <b>mode</b> is <b>regular</b> , the value is a regular expression.If <b>mode</b> is <b>time</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: 1 Maximum: 64

**Table 6-232** AccessConfigWindowsLogInfoCreate

Parameter	Mandatory	Type	Description
categorys	Yes	Array of strings	The type of Windows event logs to be collected. <b>Application</b> : application system; <b>System</b> : system; <b>Security</b> : security; <b>Setup</b> : startup Enumeration values: <ul style="list-style-type: none"><li>• <b>Application</b></li><li>• <b>System</b></li><li>• <b>Security</b></li><li>• <b>Setup</b></li></ul>
time_offset	Yes	<a href="#">AccessConfigTimeOffset</a> object	Time offset.



Parameter	Mandatory	Type	Description
event_level	Yes	Array of strings	Event level. information, warning, error, critical, verbose. Array Length: 1 - 5 Enumeration values: <ul style="list-style-type: none"> <li>• <b>information</b></li> <li>• <b>warning</b></li> <li>• <b>error</b></li> <li>• <b>critical</b></li> <li>• <b>verbose</b></li> </ul>

**Table 6-233** AccessConfigTimeOffset

Parameter	Mandatory	Type	Description
offset	Yes	Long	Time offset. When <b>unit</b> is <b>day</b> , the value ranges from <b>1</b> to <b>7</b> . When <b>unit</b> is <b>hour</b> , the value ranges from <b>1</b> to <b>168</b> . When <b>unit</b> is <b>sec</b> , the value ranges from <b>1</b> to <b>604800</b> . Minimum: <b>1</b> Maximum: <b>604800</b>
unit	Yes	String	Unit of the time offset. day, hour, sec. Enumeration values: <ul style="list-style-type: none"> <li>• <b>day</b></li> <li>• <b>hour</b></li> <li>• <b>sec</b></li> </ul>

**Table 6-234** AccessConfigBaseLogInfoCreate

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
log_stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-235** AccessConfigHostGroupIdListCreate

Parameter	Mandatory	Type	Description
host_group_id_list	Yes	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-236** accessConfigTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	No	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

**Table 6-237** DemoFieldAccess

Parameter	Mandatory	Type	Description
field_name	No	String	Field name, which must be the same as that in keys.
field_value	No	String	Field value.

**Table 6-238** Processor

Parameter	Mandatory	Type	Description
type	No	String	Parser type. The value can be <b>processor_regex</b> (regular expression), <b>processor_split_string</b> (delimiter), <b>processor_json</b> (JSON parser), <b>processor_gotime</b> (custom time type), <b>processor_filter_regex</b> (log filtering), <b>processor_drop</b> (type of a deleted field), and <b>processor_rename</b> (type of a deleted field).
detail	No	<b>Detail</b> object	Parser configuration.

**Table 6-239** Detail

Parameter	Mandatory	Type	Description
source_key	No	String	Custom time key field name.
regex	No	String	Regular expression for parsing. This field is required for a single-line completely regular expression or a multi-line completely regular expression.
keys	No	Array of strings	Field name list, which is consistent with the field_name field.
multi_line_regex	No	String	First line regular expression.
keep_source	No	Boolean	Whether to upload raw logs.
keep_source_if_parse_error	No	Boolean	Whether to upload logs that fail to be parsed.
split_sep	No	String	Delimiter. The maximum length of a custom delimiter is 10 characters, and the maximum length of a custom string is 30 characters.

Parameter	Mandatory	Type	Description
split_type	No	String	Delimiter type. The value can be <b>char</b> (custom character), <b>special_char</b> (invisible character), or <b>string</b> (custom string).
fields	No	Map<String,String>	List of added fields, in format.
drop_keys	No	Array of strings	List of deleted fields.
source_keys	No	Array of strings	List of source field names for renaming fields.
dest_keys	No	Array of strings	List of field names that are renamed and replaced.
expand_depth	No	Integer	JSON parsing depth. The value ranges from <b>1</b> (default) to <b>4</b> .
expand_connector	No	String	JSON parsing field name connector.
source_format	No	String	Custom time format.
source_value	No	String	Custom time field value.
set_time	No	Boolean	Whether to enable the custom time function.
include	No	Map<String,String>	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.
exclude	No	Map<String,String>	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.

## Response Parameters

Status code: 200

**Table 6-240** Response body parameters

Parameter	Type	Description
access_config_id	String	Ingestion configuration ID. Minimum: <b>36</b> Maximum: <b>36</b>
access_config_name	String	Ingestion configuration name. Minimum: <b>1</b> Maximum: <b>64</b>
access_config_type	String	Ingestion configuration type. The value <b>AGENT</b> indicates host log ingestion. Enumeration values: <ul style="list-style-type: none"> <li><b>AGENT</b></li> </ul>
create_time	Long	Creation time. Minimum: <b>1</b> Maximum: <b>999999999999999</b>
access_config_detail	<b>AccessConfigDetailCreate</b> object	Ingestion configuration details.
log_info	<b>AccessConfigQueryLogInfo</b> object	Log details.
host_group_info	<b>AccessConfigHostGroupIdList</b> object	Host group ID list.
access_config_tag	Array of <b>accessConfigTag</b> objects	Tag information. A tag key must be unique. Up to 20 tags are supported.
log_split	Boolean	Log splitting.
binary_collect	Boolean	Binary collection.
cluster_id	String	CCE cluster ID
encoding_format	String	Encoding format. The default format is UTF-8.
incremental_collect	Boolean	Collection policy. The value can be incremental or full.
processor_type	String	IC structuring parsing type.
demo_log	String	Example log.
demo_fields	Array of <b>DemoFieldAccess</b> objects	Example log parsing field.

Parameter	Type	Description
processors	Array of <b>Processor</b> objects	IC structuring parser.
application_id	String	ServiceStage application ID.
environment_id	String	ServiceStage environment ID.
component_id	Array of strings	ServiceStage component ID.

**Table 6-241** AccessConfigDeatilCreate

Parameter	Type	Description
paths	Array of strings	<p>Collection paths.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>The container path and host path are mandatory for the CCE type and are not mandatory for the standard output.</p> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>1 - 9</b></p>
black_paths	Array of strings	<p>Collection path blacklist.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>0 - 9</b></p>
format	<b>AccessConfigFormatCreate</b> object	Log format. Set it to either <b>single</b> or <b>multi</b> .

Parameter	Type	Description
windows_log_info	<a href="#">AccessConfigWindowsLogInfoCreate</a> object	Windows event logs.
stdout	Boolean	Standard output switch. This parameter is used only when logs are collected from CCE.
stderr	Boolean	Standard error switch. This parameter is used only when logs are collected from CCE.
pathType	String	Log collection from CCE. This parameter is used only when logs are collected from CCE. Enumeration values: <ul style="list-style-type: none"> <li>• <b>HOST_FILE</b></li> <li>• <b>CONTAINER_STDOUT</b></li> <li>• <b>CONTAINER_FILE</b></li> </ul>
namespaceRegex	String	Regular expression matching of Kubernetes namespaces. This parameter is used only when logs are collected from CCE.
podNameRegex	String	Regular expression matching of Kubernetes pods. This parameter is used only when logs are collected from CCE.
containerNameRegex	String	Regular expression matching of Kubernetes container names. This parameter is used only when logs are collected from CCE.
includeLabels	Map<String,String>	Container label trustlist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeLabels	Map<String,String>	Container label blocklist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.

Parameter	Type	Description
includeEnvs	Map<String,String >	Environment variable trustlist. A maximum of 30 environment variable whitelists can be created. Key names must be unique. This parameter is used only when logs are collected from CCE.
excludeEnvs	Map<String,String >	Environment variable blacklist. A maximum of 30 environment variables can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logLabels	Map<String,String >	Container label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logEnvs	Map<String,String >	Environment variable log tag. A maximum of 30 tags can be created. The key name must be unique. This parameter is used only when logs are collected from CCE.
includeK8sLabels	Map<String,String >	Kubernetes label trustlist. A maximum of 30 whitelists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeK8sLabels	Map<String,String >	Kubernetes label blacklist. A maximum of 30 blocklists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logK8s	Map<String,String >	Kubernetes label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
repeat_collect	Boolean	Forcible repeated collection.



Parameter	Type	Description
system_fields	Array of strings	<p>System built-in fields. When configuring a log ingestion rule, you can specify system fields to include in the tag data of each log reported.</p> <p>The system fields for host log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>category</b>, <b>collectTime</b>, and <b>__host_group__</b>.</p> <p>The system fields for Kubernetes cluster container log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>clusterId</b>, <b>podName</b>, <b>appName</b>, <b>containerName</b>, <b>namespace</b>, <b>category</b>, <b>collectTime</b>, <b>__host_group__</b>, <b>serviceID</b>, <b>podIp</b>, <b>clusterName</b>, <b>workloadType</b>, and <b>__image_name__</b>.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p> <p>When you configure metadata for the first time, this parameter is mandatory. In this case, <b>["pathFile"]</b> must be entered and other fields are optional.</p>
custom_key_value	Map<String,String >	<p>Custom key-value pairs. When configuring a log ingestion rule, you can configure up to 20 custom key-value pairs to include in the tag data of each log reported.</p> <p>A key can contain up to 128 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>A value can contain up to 1,024 characters.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p>
includeLabelsLogical	String	<p>Logic for the container label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.</p>

Parameter	Type	Description
excludeLabelsLogical	String	Logic for the container label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeK8sLabelsLogical	String	Logic for the Kubernetes label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeK8sLabelsLogical	String	Logic for the Kubernetes label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeEnvsLogical	String	Logic for the environment variable whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeEnvsLogical	String	Logic for the environment variable blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.

**Table 6-242** AccessConfigFormatCreate

Parameter	Type	Description
single	<a href="#">AccessConfigFormatSingleCreate</a> object	Single-line logs.
multi	<a href="#">AccessConfigFormatMutilCreate</a> object	Multi-line logs.

**Table 6-243** AccessConfigFormatSingleCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>system</b> indicates the system time, whereas <b>wildcard</b> indicates the time wildcard. Enumeration values: <ul style="list-style-type: none"> <li>• <b>system</b></li> <li>• <b>wildcard</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>system</b> , the value is the current timestamp.If <b>mode</b> is <b>wildcard</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-244** AccessConfigFormatMutilCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>time</b> indicates a time wildcard is used to detect log boundaries, whereas <b>regular</b> indicates that a regular expression is used. Enumeration values: <ul style="list-style-type: none"> <li>• <b>time</b></li> <li>• <b>regular</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>regular</b> , the value is a regular expression.If <b>mode</b> is <b>time</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-245** AccessConfigWindowsLogInfoCreate

Parameter	Type	Description
categorys	Array of strings	The type of Windows event logs to be collected. <b>Application</b> : application system; <b>System</b> : system; <b>Security</b> : security; <b>Setup</b> : startup Enumeration values: <ul style="list-style-type: none"> <li>• <b>Application</b></li> <li>• <b>System</b></li> <li>• <b>Security</b></li> <li>• <b>Setup</b></li> </ul>
time_offset	<a href="#">AccessConfigTimeOffset</a> object	Time offset.

Parameter	Type	Description
event_level	Array of strings	Event level. information, warning, error, critical, verbose. Array Length: <b>1 - 5</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>information</b></li> <li>• <b>warning</b></li> <li>• <b>error</b></li> <li>• <b>critical</b></li> <li>• <b>verbose</b></li> </ul>

**Table 6-246** AccessConfigTimeOffset

Parameter	Type	Description
offset	Long	Time offset. When <b>unit</b> is <b>day</b> , the value ranges from <b>1</b> to <b>7</b> . When <b>unit</b> is <b>hour</b> , the value ranges from <b>1</b> to <b>168</b> . When <b>unit</b> is <b>sec</b> , the value ranges from <b>1</b> to <b>604800</b> . Minimum: <b>1</b> Maximum: <b>604800</b>
unit	String	Unit of the time offset. day, hour, sec. Enumeration values: <ul style="list-style-type: none"> <li>• <b>day</b></li> <li>• <b>hour</b></li> <li>• <b>sec</b></li> </ul>

**Table 6-247** AccessConfigQueryLogInfo

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>128</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>128</b>

**Table 6-248** AccessConfigHostGroupIdList

Parameter	Type	Description
host_group_id_list	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-249** accessConfigTag

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

**Table 6-250** DemoFieldAccess

Parameter	Type	Description
field_name	String	Field name, which must be the same as that in keys.
field_value	String	Field value.

**Table 6-251** Processor

Parameter	Type	Description
type	String	Parser type. The value can be <b>processor_regex</b> (regular expression), <b>processor_split_string</b> (delimiter), <b>processor_json</b> (JSON parser), <b>processor_gotime</b> (custom time type), <b>processor_filter_regex</b> (log filtering), <b>processor_drop</b> (type of a deleted field), and <b>processor_rename</b> (type of a deleted field).
detail	<b>Detail</b> object	Parser configuration.

**Table 6-252** Detail

Parameter	Type	Description
source_key	String	Custom time key field name.
regex	String	Regular expression for parsing. This field is required for a single-line completely regular expression or a multi-line completely regular expression.
keys	Array of strings	Field name list, which is consistent with the field_name field.
multi_line_regex	String	First line regular expression.
keep_source	Boolean	Whether to upload raw logs.
keep_source_if_parse_error	Boolean	Whether to upload logs that fail to be parsed.
split_sep	String	Delimiter. The maximum length of a custom delimiter is 10 characters, and the maximum length of a custom string is 30 characters.
split_type	String	Delimiter type. The value can be <b>char</b> (custom character), <b>special_char</b> (invisible character), or <b>string</b> (custom string).
fields	Map<String,String>	List of added fields, in format.
drop_keys	Array of strings	List of deleted fields.
source_keys	Array of strings	List of source field names for renaming fields.

Parameter	Type	Description
dest_keys	Array of strings	List of field names that are renamed and replaced.
expand_depth	Integer	JSON parsing depth. The value ranges from <b>1</b> (default) to <b>4</b> .
expand_connector	String	JSON parsing field name connector.
source_format	String	Custom time format.
source_value	String	Custom time field value.
set_time	Boolean	Whether to enable the custom time function.
include	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.
exclude	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.

**Status code: 400**

**Table 6-253** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**



**Table 6-254** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

- Creating a log ingestion configuration (for CCE)

POST https://{endpoint}/v3/{project\_id}/lts/access-config

```
{
  "access_config_name": "myapinew322",
  "access_config_type": "K8S_CCE",
  "access_config_detail": {
    "pathType": "CONTAINER_STDOUT",
    "stdout": "true",
    "stderr": "false",
    "format": {
      "single": {
        "mode": "system",
        "value": "1678969382000"
      }
    }
  },
  "namespaceRegex": "default",
  "podNameRegex": "abc",
  "containerNameRegex": "my",
  "includeLabels": {
    "a": "1"
  },
  "excludeLabels": {
    "b": "2"
  },
  "logLabels": {
    "c": "3"
  },
  "includeK8sLabels": {
    "d": "4"
  },
  "excludeK8sLabels": {
    "e": "5"
  },
  "logK8s": {
    "f": "6"
  },
  "includeEnvs": {
    "g": "7"
  },
  "excludeEnvs": {
    "h": "8"
  },
  "logEnvs": {
    "i": "9"
  }
},
"log_info": {
```

```
"log_group_id" : "9575cb24-290c-478e-a5db-88d6d1dc513b",
"log_stream_id" : "3581bee9-8698-476e-a0ba-b0f310ed99cf"
},
"host_group_info" : {
  "host_group_id_list" : [ "12b0bbd1-4eda-456b-a641-647aa66bdeab" ]
},
"access_config_tag" : [ {
  "key" : "my01",
  "value" : "001"
}, {
  "key" : "my02",
  "value" : "002"
} ],
"binary_collect" : "false",
"log_split" : "false"
}
```

- **Creating a log ingestion configuration (for ECS)**

POST [https://{endpoint}/v3/{project\\_id}/lts/access-config](https://{endpoint}/v3/{project_id}/lts/access-config)

```
{
  "access_config_name" : "Tesxxx",
  "access_config_type" : "AGENT",
  "access_config_detail" : {
    "paths" : [ "/test/xxx", "/texxx" ],
    "black_paths" : [ "/testxxx", "/tesxxx" ],
    "format" : {
      "multi" : {
        "mode" : "time",
        "value" : "YYYY-MM-DD hh:mm:ss"
      }
    },
    "windows_log_info" : {
      "categories" : [ "System", "Security", "Setup" ],
      "event_level" : [ "warning", "error", "critical", "verbose" ],
      "time_offset" : {
        "offset" : 111,
        "unit" : "hour"
      }
    }
  },
  "log_info" : {
    "log_group_id" : "b179326d-c3be-4217-a3d9-xxxx",
    "log_stream_id" : "020a6fa0-4740-4888-af06-98xxxxxx"
  },
  "host_group_info" : {
    "host_group_id_list" : [ "4ee44d4f-a72b-40cf-a3c7-1xxxx" ]
  },
  "access_config_tag" : [ {
    "key" : "xxx",
    "value" : "xxx"
  }, {
    "key" : "xxx1",
    "value" : "xxx1"
  } ]
}
```

## Example Responses

**Status code: 200**

The ingestion configuration is created.

```
{
  "access_config_detail" : {
    "containerNameRegex" : "container-1",
    "format" : {
      "single" : {
        "mode" : "system",
```

```
"value" : "1678969382000"
  }
},
"namespaceRegex" : "default",
"pathType" : "container_stdout",
"paths" : [ ],
"podNameRegex" : "mystdout-6d7458d77c-rhjcc",
"stderr" : true,
"stdout" : true
},
"access_config_id" : "03b16999-95cf-453b-9668-7aa1fafa564e",
"access_config_name" : "myapinew32Y",
"access_config_tag" : [ {
  "key" : "my01",
  "value" : "001"
}, {
  "key" : "my02",
  "value" : "002"
} ],
"access_config_type" : "K8S_CCE",
"binary_collect" : true,
"create_time" : 1685626665176,
"log_info" : {
  "log_group_id" : "9575cb24-290c-478e-a5db-88d6d1dc513b",
  "log_group_name" : "my-group",
  "log_stream_id" : "eea03c27-e041-4bec-bd03-6afa10a6561a",
  "log_stream_name" : "lts-topic-cceapi"
},
"log_split" : true
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.1807",
  "error_msg" : "Invalid access config name"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Creating a log ingestion configuration (for CCE)

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;
```

```
import java.util.List;
import java.util.ArrayList;
import java.util.Map;
import java.util.HashMap;

public class CreateAccessConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateAccessConfigRequest request = new CreateAccessConfigRequest();
        CreateAccessConfigRequestBody body = new CreateAccessConfigRequestBody();
        List<AccessConfigTag> listbodyAccessConfigTag = new ArrayList<>();
        listbodyAccessConfigTag.add(
            new AccessConfigTag()
                .withKey("my01")
                .withValue("001")
        );
        listbodyAccessConfigTag.add(
            new AccessConfigTag()
                .withKey("my02")
                .withValue("002")
        );
        List<String> listHostGroupInfoHostGroupIdList = new ArrayList<>();
        listHostGroupInfoHostGroupIdList.add("12b0bbd1-4eda-456b-a641-647aa66bdeab");
        AccessConfigHostGroupIdListCreate hostGroupInfoBody = new
        AccessConfigHostGroupIdListCreate();
        hostGroupInfoBody.withHostGroupIdList(listHostGroupInfoHostGroupIdList);
        AccessConfigBaseLogInfoCreate logInfoBody = new AccessConfigBaseLogInfoCreate();
        logInfoBody.withLogGroupId("9575cb24-290c-478e-a5db-88d6d1dc513b")
            .withLogStreamId("3581bee9-8698-476e-a0ba-b0f310ed99cf");
        Map<String, String> listAccessConfigDetailLogK8s = new HashMap<>();
        listAccessConfigDetailLogK8s.put("f", "6");
        Map<String, String> listAccessConfigDetailExcludeK8sLabels = new HashMap<>();
        listAccessConfigDetailExcludeK8sLabels.put("e", "5");
        Map<String, String> listAccessConfigDetailIncludeK8sLabels = new HashMap<>();
        listAccessConfigDetailIncludeK8sLabels.put("d", "4");
        Map<String, String> listAccessConfigDetailLogEnvs = new HashMap<>();
        listAccessConfigDetailLogEnvs.put("i", "9");
        Map<String, String> listAccessConfigDetailLogLabels = new HashMap<>();
        listAccessConfigDetailLogLabels.put("c", "3");
        Map<String, String> listAccessConfigDetailExcludeEnvs = new HashMap<>();
        listAccessConfigDetailExcludeEnvs.put("h", "8");
        Map<String, String> listAccessConfigDetailIncludeEnvs = new HashMap<>();
        listAccessConfigDetailIncludeEnvs.put("g", "7");
        Map<String, String> listAccessConfigDetailExcludeLabels = new HashMap<>();
        listAccessConfigDetailExcludeLabels.put("b", "2");
        Map<String, String> listAccessConfigDetailIncludeLabels = new HashMap<>();
        listAccessConfigDetailIncludeLabels.put("a", "1");
        AccessConfigFormatSingleCreate singleFormat = new AccessConfigFormatSingleCreate();
        singleFormat.withMode(AccessConfigFormatSingleCreate.ModeEnum.fromValue("system"))
```

```
.withValue("1678969382000");
AccessConfigFormatCreate formatAccessConfigDetail = new AccessConfigFormatCreate();
formatAccessConfigDetail.withSingle(singleFormat);
AccessConfigDetailCreate accessConfigDetailbody = new AccessConfigDetailCreate();
accessConfigDetailbody.withFormat(formatAccessConfigDetail)
    .withStdout(true)
    .withStderr(false)
    .withPathType(AccessConfigDetailCreate.PathTypeEnum.fromValue("CONTAINER_STDOUT"))
    .withNamespaceRegex("default")
    .withPodNameRegex("abc")
    .withContainerNameRegex("my")
    .withIncludeLabels(listAccessConfigDetailIncludeLabels)
    .withExcludeLabels(listAccessConfigDetailExcludeLabels)
    .withIncludeEnvs(listAccessConfigDetailIncludeEnvs)
    .withExcludeEnvs(listAccessConfigDetailExcludeEnvs)
    .withLogLabels(listAccessConfigDetailLogLabels)
    .withLogEnvs(listAccessConfigDetailLogEnvs)
    .withIncludeK8sLabels(listAccessConfigDetailIncludeK8sLabels)
    .withExcludeK8sLabels(listAccessConfigDetailExcludeK8sLabels)
    .withLogK8s(listAccessConfigDetailLogK8s);
body.withLogSplit(false);
body.withBinaryCollect(false);
body.withAccessConfigTag(listbodyAccessConfigTag);
body.withHostGroupInfo(hostGroupInfobody);
body.withLogInfo(logInfobody);
body.withAccessConfigDetail(accessConfigDetailbody);

body.withAccessConfigType(CreateAccessConfigRequestBody.AccessConfigTypeEnum.fromValue("K8S_CE"));
body.withAccessConfigName("myapinew322");
request.withBody(body);
try {
    CreateAccessConfigResponse response = client.createAccessConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- **Creating a log ingestion configuration (for ECS)**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateAccessConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
```

running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
CreateAccessConfigRequest request = new CreateAccessConfigRequest();
CreateAccessConfigRequestBody body = new CreateAccessConfigRequestBody();
List<AccessConfigTag> listbodyAccessConfigTag = new ArrayList<>();
listbodyAccessConfigTag.add(
    new AccessConfigTag()
        .withKey("xxx")
        .withValue("xxx")
);
listbodyAccessConfigTag.add(
    new AccessConfigTag()
        .withKey("xxx1")
        .withValue("xxx1")
);
List<String> listHostGroupInfoHostGroupidList = new ArrayList<>();
listHostGroupInfoHostGroupidList.add("4ee44d4f-a72b-40cf-a3c7-1xxxxx");
AccessConfigHostGroupidListCreate hostGroupInfobody = new
AccessConfigHostGroupidListCreate();
hostGroupInfobody.withHostGroupidList(listHostGroupInfoHostGroupidList);
AccessConfigBaseLogInfoCreate logInfobody = new AccessConfigBaseLogInfoCreate();
logInfobody.withLogGroupid("b179326d-c3be-4217-a3d9-xxxx")
    .withLogStreamid("020a6fa0-4740-4888-af06-98xxxxxx");
List<AccessConfigWindowsLogInfoCreate.EventLevelEnum> listWindowsLogInfoEventLevel = new
ArrayList<>();

listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoCreate.EventLevelEnum.fromValue("w
arning"));

listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoCreate.EventLevelEnum.fromValue("e
rror"));

listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoCreate.EventLevelEnum.fromValue("cr
itical"));

listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoCreate.EventLevelEnum.fromValue("v
erbose"));
AccessConfigTimeOffset timeOffsetWindowsLogInfo = new AccessConfigTimeOffset();
timeOffsetWindowsLogInfo.withOffset(111L)
    .withUnit(AccessConfigTimeOffset.UnitEnum.fromValue("hour"));
List<AccessConfigWindowsLogInfoCreate.CategoriesEnum> listWindowsLogInfoCategories = new
ArrayList<>();

listWindowsLogInfoCategories.add(AccessConfigWindowsLogInfoCreate.CategoriesEnum.fromValue("Sys
tem"));

listWindowsLogInfoCategories.add(AccessConfigWindowsLogInfoCreate.CategoriesEnum.fromValue("Sec
urity"));

listWindowsLogInfoCategories.add(AccessConfigWindowsLogInfoCreate.CategoriesEnum.fromValue("Set
up"));
AccessConfigWindowsLogInfoCreate windowsLogInfoAccessConfigDetail = new
AccessConfigWindowsLogInfoCreate();
windowsLogInfoAccessConfigDetail.withCategories(listWindowsLogInfoCategories)
    .withTimeOffset(timeOffsetWindowsLogInfo)
    .withEventLevel(listWindowsLogInfoEventLevel);
```

```
AccessConfigFormatMutilCreate multiFormat = new AccessConfigFormatMutilCreate();
multiFormat.withMode(AccessConfigFormatMutilCreate.ModeEnum.fromValue("time"))
    .withValue("YYYY-MM-DD hh:mm:ss");
AccessConfigFormatCreate formatAccessConfigDetail = new AccessConfigFormatCreate();
formatAccessConfigDetail.withMulti(multiFormat);
List<String> listAccessConfigDetailBlackPaths = new ArrayList<>();
listAccessConfigDetailBlackPaths.add("/testxxx");
listAccessConfigDetailBlackPaths.add("/tesxxx");
List<String> listAccessConfigDetailPaths = new ArrayList<>();
listAccessConfigDetailPaths.add("/test/xxx");
listAccessConfigDetailPaths.add("/texxx");
AccessConfigDetailCreate accessConfigDetailbody = new AccessConfigDetailCreate();
accessConfigDetailbody.withPaths(listAccessConfigDetailPaths)
    .withBlackPaths(listAccessConfigDetailBlackPaths)
    .withFormat(formatAccessConfigDetail)
    .withWindowsLogInfo(windowsLogInfoAccessConfigDetail);
body.withAccessConfigTag(listbodyAccessConfigTag);
body.withHostGroupInfo(hostGroupInfobody);
body.withLogInfo(logInfobody);
body.withAccessConfigDetail(accessConfigDetailbody);

body.withAccessConfigType(CreateAccessConfigRequestBody.AccessConfigTypeEnum.fromValue("AGENT"));
body.withAccessConfigName("Tesxxx");
request.withBody(body);
try {
    CreateAccessConfigResponse response = client.createAccessConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

- Creating a log ingestion configuration (for CCE)

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
```

```
.build()
try:
    request = CreateAccessConfigRequest()
    listAccessConfigTagbody = [
        AccessConfigTag(
            key="my01",
            value="001"
        ),
        AccessConfigTag(
            key="my02",
            value="002"
        )
    ]
    listHostGroupIdListHostGroupInfo = [
        "12b0bbd1-4eda-456b-a641-647aa66bdeab"
    ]
    hostGroupInfobody = AccessConfigHostGroupIdListCreate(
        host_group_id_list=listHostGroupIdListHostGroupInfo
    )
    logInfobody = AccessConfigBaseLogInfoCreate(
        log_group_id="9575cb24-290c-478e-a5db-88d6d1dc513b",
        log_stream_id="3581bee9-8698-476e-a0ba-b0f310ed99cf"
    )
    listLogK8sAccessConfigDetail = {
        "f": "6"
    }
    listExcludeK8sLabelsAccessConfigDetail = {
        "e": "5"
    }
    listIncludeK8sLabelsAccessConfigDetail = {
        "d": "4"
    }
    listLogEnvsAccessConfigDetail = {
        "i": "9"
    }
    listLogLabelsAccessConfigDetail = {
        "c": "3"
    }
    listExcludeEnvsAccessConfigDetail = {
        "h": "8"
    }
    listIncludeEnvsAccessConfigDetail = {
        "g": "7"
    }
    listExcludeLabelsAccessConfigDetail = {
        "b": "2"
    }
    listIncludeLabelsAccessConfigDetail = {
        "a": "1"
    }
    singleFormat = AccessConfigFormatSingleCreate(
        mode="system",
        value="1678969382000"
    )
    formatAccessConfigDetail = AccessConfigFormatCreate(
        single=singleFormat
    )
    accessConfigDetailbody = AccessConfigDetailCreate(
        format=formatAccessConfigDetail,
        stdout=True,
        stderr=False,
        path_type="CONTAINER_STDOUT",
        namespace_regex="default",
        pod_name_regex="abc",
        container_name_regex="my",
        include_labels=listIncludeLabelsAccessConfigDetail,
        exclude_labels=listExcludeLabelsAccessConfigDetail,
        include_envs=listIncludeEnvsAccessConfigDetail,
```



```
exclude_envs=listExcludeEnvsAccessConfigDetail,
log_labels=listLogLabelsAccessConfigDetail,
log_envs=listLogEnvsAccessConfigDetail,
include_k8s_labels=listIncludeK8sLabelsAccessConfigDetail,
exclude_k8s_labels=listExcludeK8sLabelsAccessConfigDetail,
log_k8s=listLogK8sAccessConfigDetail
)
request.body = CreateAccessConfigRequestBody(
    log_split=False,
    binary_collect=False,
    access_config_tag=listAccessConfigTagbody,
    host_group_info=hostGroupInfobody,
    log_info=logInfobody,
    access_config_detail=accessConfigDetailbody,
    access_config_type="K8S_CCE",
    access_config_name="myapinew322"
)
response = client.create_access_config(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- **Creating a log ingestion configuration (for ECS)**

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateAccessConfigRequest()
        listAccessConfigTagbody = [
            AccessConfigTag(
                key="xxx",
                value="xxx"
            ),
            AccessConfigTag(
                key="xxx1",
                value="xxx1"
            )
        ]
        listHostGroupIdListHostGroupInfo = [
            "4ee44d4f-a72b-40cf-a3c7-1xxxxx"
        ]
        hostGroupInfobody = AccessConfigHostGroupIdListCreate(
            host_group_id_list=listHostGroupIdListHostGroupInfo
        )
```

```
logInfobody = AccessConfigBaseLogInfoCreate(
    log_group_id="b179326d-c3be-4217-a3d9-xxxx",
    log_stream_id="020a6fa0-4740-4888-af06-98xxxxxx"
)
listEventLevelWindowsLogInfo = [
    "warning",
    "error",
    "critical",
    "verbose"
]
timeOffsetWindowsLogInfo = AccessConfigTimeOffset(
    offset=111,
    unit="hour"
)
listCategorysWindowsLogInfo = [
    "System",
    "Security",
    "Setup"
]
windowsLogInfoAccessConfigDetail = AccessConfigWindowsLogInfoCreate(
    categorys=listCategorysWindowsLogInfo,
    time_offset=timeOffsetWindowsLogInfo,
    event_level=listEventLevelWindowsLogInfo
)
multiFormat = AccessConfigFormatMutilCreate(
    mode="time",
    value="YYYY-MM-DD hh:mm:ss"
)
formatAccessConfigDetail = AccessConfigFormatCreate(
    multi=multiFormat
)
listBlackPathsAccessConfigDetail = [
    "/testxxx",
    "/tesxxx"
]
listPathsAccessConfigDetail = [
    "/test/xxx",
    "/texxx"
]
accessConfigDetailbody = AccessConfigDeatilCreate(
    paths=listPathsAccessConfigDetail,
    black_paths=listBlackPathsAccessConfigDetail,
    format=formatAccessConfigDetail,
    windows_log_info=windowsLogInfoAccessConfigDetail
)
request.body = CreateAccessConfigRequestBody(
    access_config_tag=listAccessConfigTagbody,
    host_group_info=hostGroupInfobody,
    log_info=logInfobody,
    access_config_detail=accessConfigDetailbody,
    access_config_type="AGENT",
    access_config_name="Tesxxx"
)
response = client.create_access_config(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

- Creating a log ingestion configuration (for CCE)

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
```

```
lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateAccessConfigRequest{}
    keyAccessConfigTag := "my01"
    valueAccessConfigTag := "001"
    keyAccessConfigTag1 := "my02"
    valueAccessConfigTag1 := "002"
    var listAccessConfigTagbody = []model.AccessConfigTag{
        {
            Key: &keyAccessConfigTag,
            Value: &valueAccessConfigTag,
        },
        {
            Key: &keyAccessConfigTag1,
            Value: &valueAccessConfigTag1,
        },
    }
    var listHostGroupIdListHostGroupInfo = []string{
        "12b0bbd1-4eda-456b-a641-647aa66bdeab",
    }
    hostGroupInfobody := &model.AccessConfigHostGroupIdListCreate{
        HostGroupIdList: listHostGroupIdListHostGroupInfo,
    }
    logInfobody := &model.AccessConfigBaseLogInfoCreate{
        LogGroupId: "9575cb24-290c-478e-a5db-88d6d1dc513b",
        LogStreamId: "3581bee9-8698-476e-a0ba-b0f310ed99cf",
    }
    var listLogK8sAccessConfigDetail = map[string]string{
        "f": "6",
    }
    var listExcludeK8sLabelsAccessConfigDetail = map[string]string{
        "e": "5",
    }
    var listIncludeK8sLabelsAccessConfigDetail = map[string]string{
        "d": "4",
    }
    var listLogEnvsAccessConfigDetail = map[string]string{
        "i": "9",
    }
    var listLogLabelsAccessConfigDetail = map[string]string{
        "c": "3",
    }
    var listExcludeEnvsAccessConfigDetail = map[string]string{
```

```
    "h": "8",
  }
  var listIncludeEnvsAccessConfigDetail = map[string]string{
    "g": "7",
  }
  var listExcludeLabelsAccessConfigDetail = map[string]string{
    "b": "2",
  }
  var listIncludeLabelsAccessConfigDetail = map[string]string{
    "a": "1",
  }
  modeSingle:= model.GetAccessConfigFormatSingleCreateModeEnum().SYSTEM
  valueSingle:= "1678969382000"
  singleFormat := &model.AccessConfigFormatSingleCreate{
    Mode: &modeSingle,
    Value: &valueSingle,
  }
  formatAccessConfigDetail := &model.AccessConfigFormatCreate{
    Single: singleFormat,
  }
  stdoutAccessConfigDetail:= true
  stderrAccessConfigDetail:= false
  pathTypeAccessConfigDetail:=
model.GetAccessConfigDeatilCreatePathTypeEnum().CONTAINER_STDOUT
namespaceRegexAccessConfigDetail:= "default"
podNameRegexAccessConfigDetail:= "abc"
containerNameRegexAccessConfigDetail:= "my"
accessConfigDetailbody := &model.AccessConfigDeatilCreate{
  Format: formatAccessConfigDetail,
  Stdout: &stdoutAccessConfigDetail,
  Stderr: &stderrAccessConfigDetail,
  PathType: &pathTypeAccessConfigDetail,
  NamespaceRegex: &namespaceRegexAccessConfigDetail,
  PodNameRegex: &podNameRegexAccessConfigDetail,
  ContainerNameRegex: &containerNameRegexAccessConfigDetail,
  IncludeLabels: listIncludeLabelsAccessConfigDetail,
  ExcludeLabels: listExcludeLabelsAccessConfigDetail,
  IncludeEnvs: listIncludeEnvsAccessConfigDetail,
  ExcludeEnvs: listExcludeEnvsAccessConfigDetail,
  LogLabels: listLogLabelsAccessConfigDetail,
  LogEnvs: listLogEnvsAccessConfigDetail,
  IncludeK8sLabels: listIncludeK8sLabelsAccessConfigDetail,
  ExcludeK8sLabels: listExcludeK8sLabelsAccessConfigDetail,
  LogK8s: listLogK8sAccessConfigDetail,
}
logSplitCreateAccessConfigRequestBody:= false
binaryCollectCreateAccessConfigRequestBody:= false
request.Body = &model.CreateAccessConfigRequestBody{
  LogSplit: &logSplitCreateAccessConfigRequestBody,
  BinaryCollect: &binaryCollectCreateAccessConfigRequestBody,
  AccessConfigTag: &listAccessConfigTagbody,
  HostGroupInfo: hostGroupInfobody,
  LogInfo: logInfobody,
  AccessConfigDetail: accessConfigDetailbody,
  AccessConfigType: model.GetCreateAccessConfigRequestBodyAccessConfigTypeEnum().K8_S_CCE,
  AccessConfigName: "myapinew322",
}
response, err := client.CreateAccessConfig(request)
if err == nil {
  fmt.Printf("%+v\n", response)
} else {
  fmt.Println(err)
}
}
```

- Creating a log ingestion configuration (for ECS)

```
package main
```

```
import (
  "fmt"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateAccessConfigRequest{}
    keyAccessConfigTag := "xxx"
    valueAccessConfigTag := "xxx"
    keyAccessConfigTag1 := "xxx1"
    valueAccessConfigTag1 := "xxx1"
    var listAccessConfigTagbody = []model.AccessConfigTag{
        {
            Key: &keyAccessConfigTag,
            Value: &valueAccessConfigTag,
        },
        {
            Key: &keyAccessConfigTag1,
            Value: &valueAccessConfigTag1,
        },
    }
    var listHostGroupIdListHostGroupInfo = []string{
        "4ee44d4f-a72b-40cf-a3c7-1xxxxx",
    }
    hostGroupInfobody := &model.AccessConfigHostGroupIdListCreate{
        HostGroupIdList: listHostGroupIdListHostGroupInfo,
    }
    logInfobody := &model.AccessConfigBaseLogInfoCreate{
        LogGroupId: "b179326d-c3be-4217-a3d9-xxxx",
        LogStreamId: "020a6fa0-4740-4888-af06-98xxxxx",
    }
    var listEventLevelWindowsLogInfo = []model.AccessConfigWindowsLogInfoCreateEventLevel{
        model.GetAccessConfigWindowsLogInfoCreateEventLevelEnum().WARNING,
        model.GetAccessConfigWindowsLogInfoCreateEventLevelEnum().ERROR,
        model.GetAccessConfigWindowsLogInfoCreateEventLevelEnum().CRITICAL,
        model.GetAccessConfigWindowsLogInfoCreateEventLevelEnum().VERBOSE,
    }
    timeOffsetWindowsLogInfo := &model.AccessConfigTimeOffset{
        Offset: int64(111),
        Unit: model.GetAccessConfigTimeOffsetUnitEnum().HOUR,
    }
    var listCategoriesWindowsLogInfo = []model.AccessConfigWindowsLogInfoCreateCategories{
        model.GetAccessConfigWindowsLogInfoCreateCategoriesEnum().SYSTEM,
        model.GetAccessConfigWindowsLogInfoCreateCategoriesEnum().SECURITY,
        model.GetAccessConfigWindowsLogInfoCreateCategoriesEnum().SETUP,
    }
}
```

```

windowsLogInfoAccessConfigDetail := &model.AccessConfigWindowsLogInfoCreate{
    Category: listCategorysWindowsLogInfo,
    TimeOffset: timeOffsetWindowsLogInfo,
    EventLevel: listEventLevelWindowsLogInfo,
}
modeMulti:= model.GetAccessConfigFormatMutilCreateModeEnum().TIME
valueMulti:= "YYYY-MM-DD hh:mm:ss"
multiFormat := &model.AccessConfigFormatMutilCreate{
    Mode: &modeMulti,
    Value: &valueMulti,
}
formatAccessConfigDetail := &model.AccessConfigFormatCreate{
    Multi: multiFormat,
}
var listBlackPathsAccessConfigDetail = []string{
    "/testxxx",
    "/tesxxx",
}
var listPathsAccessConfigDetail = []string{
    "/test/xxx",
    "/texxx",
}
accessConfigDetailbody := &model.AccessConfigDeatilCreate{
    Paths: &listPathsAccessConfigDetail,
    BlackPaths: &listBlackPathsAccessConfigDetail,
    Format: formatAccessConfigDetail,
    WindowsLogInfo: windowsLogInfoAccessConfigDetail,
}
request.Body = &model.CreateAccessConfigRequestBody{
    AccessConfigTag: &listAccessConfigTagbody,
    HostGroupInfo: hostGroupInfobody,
    LogInfo: logInfobody,
    AccessConfigDetail: accessConfigDetailbody,
    AccessConfigType: model.GetCreateAccessConfigRequestBodyAccessConfigTypeEnum().AGENT,
    AccessConfigName: "Tesxxx",
}
response, err := client.CreateAccessConfig(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The ingestion configuration is created.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.5.4 Deleting Log Ingestion Configurations

### Function

This API is used to delete log ingestion configurations.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v3/{project\_id}/lts/access-config

**Table 6-255** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Account Tenant ID, Project Resource Set ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

### Request Parameters

**Table 6-256** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-257** Request body parameters

Parameter	Mandatory	Type	Description
access_config_id_list	Yes	Array of strings	Ingestion configuration ID list. Minimum: <b>36</b> Maximum: <b>36</b>

## Response Parameters

Status code: 200

**Table 6-258** Response body parameters

Parameter	Type	Description
result	Array of <a href="#">AccessConfigInfo</a> objects	Ingestion configuration list.
total	Long	Total number of ingestion configurations. Minimum: <b>0</b> Maximum: <b>1000</b>

**Table 6-259** AccessConfigInfo

Parameter	Type	Description
access_config_id	String	Ingestion configuration ID. Minimum: <b>36</b> Maximum: <b>36</b>
access_config_name	String	Ingestion configuration name. Minimum: <b>1</b> Maximum: <b>64</b>
access_config_type	String	Ingestion configuration type. The value <b>AGENT</b> indicates host log ingestion. Enumeration values: <ul style="list-style-type: none"> <li><b>AGENT</b></li> </ul>
create_time	Long	Creation time. Minimum: <b>1</b> Maximum: <b>9999999999999</b>



Parameter	Type	Description
access_config_detail	<a href="#">AccessConfigDetailCreate</a> object	Ingestion configuration details.
log_info	<a href="#">AccessConfigQueryLogInfo</a> object	Log details.
host_group_info	<a href="#">AccessConfigHostGroupIdList</a> object	Host group ID list.
access_config_tag	Array of <a href="#">accessConfigTag</a> objects	Tag information. A tag key must be unique. Up to 20 tags are supported.
log_split	Boolean	Log splitting.
binary_collect	Boolean	Binary collection.
cluster_id	String	CCE cluster ID
encoding_format	String	Encoding format. The default format is UTF-8.
incremental_collect	Boolean	Collection policy. The value can be incremental or full.
processor_type	String	IC structuring parsing type.
demo_log	String	Example log.
demo_fields	Array of <a href="#">DemoFieldAccess</a> objects	Example log parsing field.
processors	Array of <a href="#">Processor</a> objects	IC structuring parser.
application_id	String	ServiceStage application ID.
environment_id	String	ServiceStage environment ID.
component_id	Array of strings	ServiceStage component ID.

**Table 6-260** AccessConfigDeatilCreate

Parameter	Type	Description
paths	Array of strings	<p>Collection paths.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>The container path and host path are mandatory for the CCE type and are not mandatory for the standard output.</p> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>1 - 9</b></p>
black_paths	Array of strings	<p>Collection path blacklist.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>0 - 9</b></p>
format	<a href="#">AccessConfigFormatCreate</a> object	Log format. Set it to either <b>single</b> or <b>multi</b> .
windows_log_info	<a href="#">AccessConfigWindowsLogInfoCreate</a> object	Windows event logs.
stdout	Boolean	Standard output switch. This parameter is used only when logs are collected from CCE.
stderr	Boolean	Standard error switch. This parameter is used only when logs are collected from CCE.

Parameter	Type	Description
pathType	String	Log collection from CCE. This parameter is used only when logs are collected from CCE. Enumeration values: <ul style="list-style-type: none"> <li>• <b>HOST_FILE</b></li> <li>• <b>CONTAINER_STDOUT</b></li> <li>• <b>CONTAINER_FILE</b></li> </ul>
namespaceRegex	String	Regular expression matching of Kubernetes namespaces. This parameter is used only when logs are collected from CCE.
podNameRegex	String	Regular expression matching of Kubernetes pods. This parameter is used only when logs are collected from CCE.
containerNameRegex	String	Regular expression matching of Kubernetes container names. This parameter is used only when logs are collected from CCE.
includeLabels	Map<String,String>	Container label trustlist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeLabels	Map<String,String>	Container label blacklist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
includeEnvs	Map<String,String>	Environment variable trustlist. A maximum of 30 environment variable whitelists can be created. Key names must be unique. This parameter is used only when logs are collected from CCE.
excludeEnvs	Map<String,String>	Environment variable blacklist. A maximum of 30 environment variables can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.

Parameter	Type	Description
logLabels	Map<String,String >	Container label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logEnvs	Map<String,String >	Environment variable log tag. A maximum of 30 tags can be created. The key name must be unique. This parameter is used only when logs are collected from CCE.
includeK8sLabels	Map<String,String >	Kubernetes label trustlist. A maximum of 30 whitelists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeK8sLabels	Map<String,String >	Kubernetes label blacklist. A maximum of 30 blocklists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logK8s	Map<String,String >	Kubernetes label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
repeat_collect	Boolean	Forcible repeated collection.

Parameter	Type	Description
system_fields	Array of strings	<p>System built-in fields. When configuring a log ingestion rule, you can specify system fields to include in the tag data of each log reported.</p> <p>The system fields for host log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>category</b>, <b>collectTime</b>, and <b>__host_group__</b>.</p> <p>The system fields for Kubernetes cluster container log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>clusterId</b>, <b>podName</b>, <b>appName</b>, <b>containerName</b>, <b>namespace</b>, <b>category</b>, <b>collectTime</b>, <b>__host_group__</b>, <b>serviceID</b>, <b>podIp</b>, <b>clusterName</b>, <b>workloadType</b>, and <b>__image_name__</b>.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p> <p>When you configure metadata for the first time, this parameter is mandatory. In this case, <b>["pathFile"]</b> must be entered and other fields are optional.</p>
custom_key_value	Map<String,String >	<p>Custom key-value pairs. When configuring a log ingestion rule, you can configure up to 20 custom key-value pairs to include in the tag data of each log reported.</p> <p>A key can contain up to 128 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>A value can contain up to 1,024 characters.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p>
includeLabelsLogical	String	<p>Logic for the container label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.</p>

Parameter	Type	Description
excludeLabelsLogical	String	Logic for the container label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeK8sLabelsLogical	String	Logic for the Kubernetes label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeK8sLabelsLogical	String	Logic for the Kubernetes label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeEnvsLogical	String	Logic for the environment variable whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeEnvsLogical	String	Logic for the environment variable blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.

**Table 6-261** AccessConfigFormatCreate

Parameter	Type	Description
single	<a href="#">AccessConfigFormatSingleCreate</a> object	Single-line logs.
multi	<a href="#">AccessConfigFormatMutilCreate</a> object	Multi-line logs.

**Table 6-262** AccessConfigFormatSingleCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>system</b> indicates the system time, whereas <b>wildcard</b> indicates the time wildcard. Enumeration values: <ul style="list-style-type: none"> <li>• <b>system</b></li> <li>• <b>wildcard</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>system</b> , the value is the current timestamp.If <b>mode</b> is <b>wildcard</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-263** AccessConfigFormatMutilCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>time</b> indicates a time wildcard is used to detect log boundaries, whereas <b>regular</b> indicates that a regular expression is used. Enumeration values: <ul style="list-style-type: none"> <li>• <b>time</b></li> <li>• <b>regular</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>regular</b> , the value is a regular expression.If <b>mode</b> is <b>time</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-264** AccessConfigWindowsLogInfoCreate

Parameter	Type	Description
categorys	Array of strings	The type of Windows event logs to be collected. <b>Application</b> : application system; <b>System</b> : system; <b>Security</b> : security; <b>Setup</b> : startup Enumeration values: <ul style="list-style-type: none"> <li>• <b>Application</b></li> <li>• <b>System</b></li> <li>• <b>Security</b></li> <li>• <b>Setup</b></li> </ul>
time_offset	<a href="#">AccessConfigTimeOffset</a> object	Time offset.



Parameter	Type	Description
event_level	Array of strings	Event level. information, warning, error, critical, verbose. Array Length: <b>1 - 5</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>information</b></li> <li>• <b>warning</b></li> <li>• <b>error</b></li> <li>• <b>critical</b></li> <li>• <b>verbose</b></li> </ul>

**Table 6-265** AccessConfigTimeOffset

Parameter	Type	Description
offset	Long	Time offset. When <b>unit</b> is <b>day</b> , the value ranges from <b>1</b> to <b>7</b> . When <b>unit</b> is <b>hour</b> , the value ranges from <b>1</b> to <b>168</b> . When <b>unit</b> is <b>sec</b> , the value ranges from <b>1</b> to <b>604800</b> . Minimum: <b>1</b> Maximum: <b>604800</b>
unit	String	Unit of the time offset. day, hour, sec. Enumeration values: <ul style="list-style-type: none"> <li>• <b>day</b></li> <li>• <b>hour</b></li> <li>• <b>sec</b></li> </ul>

**Table 6-266** AccessConfigQueryLogInfo

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>128</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>128</b>

**Table 6-267** AccessConfigHostGroupIdList

Parameter	Type	Description
host_group_id_list	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-268** accessConfigTag

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

**Table 6-269** DemoFieldAccess

Parameter	Type	Description
field_name	String	Field name, which must be the same as that in keys.
field_value	String	Field value.

**Table 6-270** Processor

Parameter	Type	Description
type	String	Parser type. The value can be <b>processor_regex</b> (regular expression), <b>processor_split_string</b> (delimiter), <b>processor_json</b> (JSON parser), <b>processor_gotime</b> (custom time type), <b>processor_filter_regex</b> (log filtering), <b>processor_drop</b> (type of a deleted field), and <b>processor_rename</b> (type of a deleted field).
detail	<b>Detail</b> object	Parser configuration.

**Table 6-271** Detail

Parameter	Type	Description
source_key	String	Custom time key field name.
regex	String	Regular expression for parsing. This field is required for a single-line completely regular expression or a multi-line completely regular expression.
keys	Array of strings	Field name list, which is consistent with the field_name field.
multi_line_regex	String	First line regular expression.
keep_source	Boolean	Whether to upload raw logs.
keep_source_if_parse_error	Boolean	Whether to upload logs that fail to be parsed.
split_sep	String	Delimiter. The maximum length of a custom delimiter is 10 characters, and the maximum length of a custom string is 30 characters.
split_type	String	Delimiter type. The value can be <b>char</b> (custom character), <b>special_char</b> (invisible character), or <b>string</b> (custom string).
fields	Map<String,String>	List of added fields, in format.
drop_keys	Array of strings	List of deleted fields.
source_keys	Array of strings	List of source field names for renaming fields.

Parameter	Type	Description
dest_keys	Array of strings	List of field names that are renamed and replaced.
expand_depth	Integer	JSON parsing depth. The value ranges from <b>1</b> (default) to <b>4</b> .
expand_connector	String	JSON parsing field name connector.
source_format	String	Custom time format.
source_value	String	Custom time field value.
set_time	Boolean	Whether to enable the custom time function.
include	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.
exclude	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.

**Status code: 400**

**Table 6-272** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**

**Table 6-273** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

### Deleting Log Ingestion Configurations

```
DELETE https://{endpoint}/v3/{project_id}/lts/access-config
/v3/{project_id}/lts/access-config
{"access_config_id_list":["xxxx","xxxx"]}
```

## Example Responses

### Status code: 200

Ingestion configurations deleted.

```
{
  "result": [ {
    "access_config_detail": {
      "black_paths": [ "/wjy/hei/tesxxx", "/wjy/hei/tesxxx" ],
      "format": {
        "single": {
          "mode": "wildcard",
          "value": "1111"
        }
      }
    },
    "paths": [ "/wjy/tesxxx", "/wjy/texxx", "/wjyxxxxx" ],
    "windows_log_info": {
      "categorys": [ "System", "Application", "Security", "Setup" ],
      "event_level": [ "information", "warning", "error", "critical", "verbose" ],
      "time_offset": {
        "offset": 168,
        "unit": "hour"
      }
    }
  } ],
  "access_config_id": "aa58d29e-21a9-4761-ba16-8xxxxx",
  "access_config_name": "CollectionWjyxxxxt2",
  "access_config_tag": [ {
    "key": "xxx",
    "value": "xxx"
  }, {
    "key": "xxx1",
    "value": "xxx1"
  } ],
  "access_config_type": "AGENT",
  "create_time": 1635043645628,
  "host_group_info": {
    "host_group_id_list": [ "de4dbed4-a3bc-4877-a7ee-0xxxxxx6" ]
  }
}
```

```
"log_info" : {
  "log_group_id" : "9a7e2183-2d6d-4732-9a9b-e89xxxxx0",
  "log_group_name" : "lts-groupxxxxka",
  "log_stream_id" : "c4de0538-53e6-41fd-b951-a8xxxxx58d7",
  "log_stream_name" : "lts-topic-txxxxx"
}
}],
"total" : 1
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.1807",
  "error_msg" : "Invalid access config id"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Deleting Log Ingestion Configurations

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class DeleteAccessConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();
DeleteAccessConfigRequest request = new DeleteAccessConfigRequest();
try {
    DeleteAccessConfigResponse response = client.deleteAccessConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Deleting Log Ingestion Configurations

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteAccessConfigRequest()
        response = client.delete_access_config(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Deleting Log Ingestion Configurations

```
package main

import (
    "fmt"
```

```

"github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteAccessConfigRequest{}
    response, err := client.DeleteAccessConfig(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Ingestion configurations deleted.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).



## 6.5.5 Modifying a Log Ingestion Configuration

### Function

This API is used to modify a log ingestion configuration.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v3/{project\_id}/lts/access-config

**Table 6-274** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Account Tenant ID, Project Resource Set ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

### Request Parameters

**Table 6-275** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-276** Request body parameters

Parameter	Mandatory	Type	Description
access_config_id	Yes	String	Ingestion configuration ID. Minimum: <b>36</b> Maximum: <b>36</b>
access_config_name	No	String	Ingestion configuration name. It should match the regular expression: <code>^(?!)(?!)(?!.*?.\$)[\u4e00-\u9fa5a-zA-Z0-9-]{1,64}\$</code> .
access_config_detail	No	<a href="#">AccessConfigDetailUpdate</a> object	Ingestion configuration details.
host_group_info	No	<a href="#">AccessConfigHostGroupList</a> object	Host group ID list.
access_config_tag	No	Array of <a href="#">accessConfigTag</a> objects	Tag information. A tag key must be unique. Up to 20 tags are supported.
log_split	No	Boolean	Log splitting.
binary_collect	No	Boolean	Binary collection.
cluster_id	No	String	CCE cluster ID. This parameter is mandatory for the CCE type.
incremental_collect	No	Boolean	Whether to perform incremental collection. <b>true</b> indicates incremental collection and <b>false</b> indicates full collection.
encoding_format	No	String	Encoding format. The default format is UTF-8.
processor_type	No	String	IC structuring parsing type.
demo_log	No	String	Example log.
demo_fields	No	Array of <a href="#">DemoFieldAccess</a> objects	Example log parsing field.
processors	No	Array of <a href="#">Processor</a> objects	IC structuring parser.
application_id	No	String	ServiceStage application ID.

Parameter	Mandatory	Type	Description
environment_id	No	String	ServiceStage environment ID.
component_id	No	Array of strings	ServiceStage component ID.

**Table 6-277** AccessConfigDeatilUpdate

Parameter	Mandatory	Type	Description
paths	No	Array of strings	<ol style="list-style-type: none"> <li>The path must start with a slash (/) or a <i>letter</i>.</li> <li>The value cannot contain special characters &lt;&gt;  " and cannot contain only slashes (/).</li> <li>The level-1 directory does not support wildcard characters () and cannot start with /**/.</li> <li>Only one double asterisk (**) can be contained in a path.</li> <li>The maximum number is 10. Minimum: <b>1</b> Maximum: <b>128</b></li> </ol>
black_paths	No	Array of strings	<ol style="list-style-type: none"> <li>The path must start with a slash (/) or a <i>letter</i>.</li> <li>The value cannot contain special characters &lt;&gt;  " and cannot contain only slashes (/).</li> <li>The level-1 directory does not support wildcard characters () and cannot start with /**/.</li> <li>Only one double asterisk (**) can be contained in a path.</li> <li>The maximum number is 10. Minimum: <b>1</b> Maximum: <b>128</b></li> </ol>

Parameter	Mandatory	Type	Description
format	No	<a href="#">AccessConfigFormatUpdate</a> object	Log format. Set it to either <b>single</b> or <b>multi</b> .
windows_log_info	No	<a href="#">AccessConfigWindowsLogInfoUpdate</a> object	Windows event logs. To stop collecting Windows event logs, leave this parameter to empty.
stdout	No	Boolean	Standard output switch. This parameter is used only when the CCE ingestion type is used.
stderr	No	Boolean	Standard output error switch. This parameter is used only when the CCE ingestion type is used.
pathType	No	String	CCE ingestion type. This parameter is used only when the CCE ingestion type is used. Enumeration values: <ul style="list-style-type: none"> <li>• <b>HOST_FILE</b></li> <li>• <b>CONTAINER_STDOUT</b></li> <li>• <b>CONTAINER_FILE</b></li> </ul>
namespaceRegex	No	String	Regular expression matching of Kubernetes namespaces. This parameter is used only when the CCE ingestion type is used.
podNameRegex	No	String	Regular expression matching of the Kubernetes container name. This parameter is used only when the CCE ingestion type is used.
containerNameRegex	No	String	Regular expression matching of the Kubernetes container name. This parameter is used only when the CCE ingestion type is used.
includeLabels	No	Map<String,String>	Container label whitelist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when the access type is CCE.

Parameter	Mandatory	Type	Description
excludeLabels	No	Map<String,String>	Container label blacklist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when the CCE access type is used.
includeEnvs	No	Map<String,String>	Environment variable whitelist. A maximum of 30 environment variable whitelists can be created. Key names must be unique. This parameter is used only when the access type is CCE.
excludeEnvs	No	Map<String,String>	Environment variable blacklist. A maximum of 30 environment variables can be created. The key names must be unique. This parameter is used only when the CCE access type is used.
logLabels	No	Map<String,String>	Environment variable log tag. A maximum of 30 tags can be created. The key name must be unique. This parameter is used only when the access type is CCE.
logEnvs	No	Map<String,String>	Environment variable log tag. A maximum of 30 tags can be created. The key name must be unique. This parameter is used only when the access type is CCE.
includeK8sLabels	No	Map<String,String>	Specifies the Kubernetes label whitelist. A maximum of 30 Kubernetes label whitelists can be created. The key names must be unique. This parameter is used only when the access type is CCE.
excludeK8sLabels	No	Map<String,String>	Specifies the Kubernetes label blacklist. A maximum of 30 Kubernetes label blacklists can be created. The key names must be unique. This parameter is used only when the CCE access type is used.

Parameter	Mandatory	Type	Description
logK8s	No	Map<String,String>	Specifies the Kubernetes label. A maximum of 30 Kubernetes labels can be created. The key names must be unique. This parameter is used only when the access type is CCE.
system_fields	No	Array of strings	<p>System built-in fields. When configuring a log ingestion rule, you can specify system fields to include in the tag data of each log reported.</p> <p>The system fields for host log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>category</b>, <b>collectTime</b>, and <b>__host_group__</b>.</p> <p>The system fields for Kubernetes cluster container log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>clusterId</b>, <b>podName</b>, <b>appName</b>, <b>containerName</b>, <b>nameSpace</b>, <b>category</b>, <b>collectTime</b>, <b>__host_group__</b>, <b>serviceID</b>, <b>podIp</b>, <b>clusterName</b>, <b>workloadType</b>, and <b>__image_name__</b>.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p> <p>When you configure metadata for the first time, this parameter is mandatory. In this case, <b>["pathFile"]</b> must be entered and other fields are optional.</p>

Parameter	Mandatory	Type	Description
custom_key_value	No	Map<String,String>	<p>Custom key-value pairs. When configuring a log ingestion rule, you can configure up to 20 custom key-value pairs to include in the tag data of each log reported.</p> <p>A key can contain up to 128 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>A value can contain up to 1,024 characters.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p>
includeLabels Logical	No	String	<p>Logic for the container label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.</p>
excludeLabels Logical	No	String	<p>Logic for the container label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.</p>

Parameter	Mandatory	Type	Description
includeK8sLabelsLogical	No	String	Logic for the Kubernetes label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label whitelist, <b>AND</b> indicates that the whitelist takes effect only when all the conditions are met, and <b>OR</b> indicates that the whitelist takes effect when one of the conditions is met.
excludeK8sLabelsLogical	No	String	Logic for the Kubernetes label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label blacklist, <b>AND</b> indicates that the blacklist takes effect only when all the conditions are met, and <b>OR</b> indicates that the blacklist takes effect when one of the conditions is met.
includeEnvsLogical	No	String	Logic for the environment variable whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable whitelist, <b>AND</b> indicates that the whitelist takes effect only when all the conditions are met, and <b>OR</b> indicates that the whitelist takes effect when one of the conditions is met.
excludeEnvsLogical	No	String	Logic for the environment variable blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable blacklist, <b>AND</b> indicates that the blacklist takes effect only when all the conditions are met, and <b>OR</b> indicates that the blacklist takes effect when one of the conditions is met.



**Table 6-278** AccessConfigFormatUpdate

Parameter	Mandatory	Type	Description
single	No	<a href="#">AccessConfigFormatSingle</a> object	Single-line logs.
multi	No	<a href="#">AccessConfigFormatMutil</a> object	Multi-line logs.

**Table 6-279** AccessConfigFormatSingle

Parameter	Mandatory	Type	Description
mode	Yes	String	Single-line logs. <b>system</b> indicates the system time, whereas <b>wildcard</b> indicates the time wildcard. Enumeration values: <ul style="list-style-type: none"> <li>• <b>system</b></li> <li>• <b>wildcard</b></li> </ul>
value	Yes	String	Log time.If <b>mode</b> is <b>system</b> , the value is the current timestamp.If <b>mode</b> is <b>wildcard</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-280** AccessConfigFormatMutil

Parameter	Mandatory	Type	Description
mode	Yes	String	Single-line logs. <b>time</b> indicates a time wildcard is used to detect log boundaries, whereas <b>regular</b> indicates that a regular expression is used. Enumeration values: <ul style="list-style-type: none"> <li>• <b>time</b></li> <li>• <b>regular</b></li> </ul>
value	Yes	String	Log time.If <b>mode</b> is <b>regular</b> , the value is a regular expression.If <b>mode</b> is <b>time</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-281** AccessConfigWindowsLogInfoUpdate

Parameter	Mandatory	Type	Description
categorys	No	Array of strings	The type of Windows event logs to be collected. <b>Application</b> : application system; <b>System</b> : system; <b>Security</b> : security; <b>Setup</b> : startup Enumeration values: <ul style="list-style-type: none"> <li>• <b>Application</b></li> <li>• <b>System</b></li> <li>• <b>Security</b></li> <li>• <b>Setup</b></li> </ul>
time_offset	No	<a href="#">AccessConfigTimeOffset</a> object	Time offset.

Parameter	Mandatory	Type	Description
event_level	No	Array of strings	Event level. information, warning, error, critical, verbose. Enumeration values: <ul style="list-style-type: none"> <li>• <b>information</b></li> <li>• <b>warning</b></li> <li>• <b>error</b></li> <li>• <b>critical</b></li> <li>• <b>verbose</b></li> </ul>

**Table 6-282** AccessConfigTimeOffset

Parameter	Mandatory	Type	Description
offset	Yes	Long	Time offset. When <b>unit</b> is <b>day</b> , the value ranges from <b>1</b> to <b>7</b> . When <b>unit</b> is <b>hour</b> , the value ranges from <b>1</b> to <b>168</b> . When <b>unit</b> is <b>sec</b> , the value ranges from <b>1</b> to <b>604800</b> . Minimum: <b>1</b> Maximum: <b>604800</b>
unit	Yes	String	Unit of the time offset. day, hour, sec. Enumeration values: <ul style="list-style-type: none"> <li>• <b>day</b></li> <li>• <b>hour</b></li> <li>• <b>sec</b></li> </ul>

**Table 6-283** AccessConfigHostGroupIdList

Parameter	Mandatory	Type	Description
host_group_id_list	Yes	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-284** accessConfigTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	No	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

**Table 6-285** DemoFieldAccess

Parameter	Mandatory	Type	Description
field_name	No	String	Field name, which must be the same as that in keys.
field_value	No	String	Field value.

**Table 6-286** Processor

Parameter	Mandatory	Type	Description
type	No	String	Parser type. The value can be <b>processor_regex</b> (regular expression), <b>processor_split_string</b> (delimiter), <b>processor_json</b> (JSON parser), <b>processor_gotime</b> (custom time type), <b>processor_filter_regex</b> (log filtering), <b>processor_drop</b> (type of a deleted field), and <b>processor_rename</b> (type of a deleted field).
detail	No	<b>Detail</b> object	Parser configuration.

**Table 6-287** Detail

Parameter	Mandatory	Type	Description
source_key	No	String	Custom time key field name.

Parameter	Mandatory	Type	Description
regex	No	String	Regular expression for parsing. This field is required for a single-line completely regular expression or a multi-line completely regular expression.
keys	No	Array of strings	Field name list, which is consistent with the field_name field.
multi_line_regex	No	String	First line regular expression.
keep_source	No	Boolean	Whether to upload raw logs.
keep_source_if_parse_error	No	Boolean	Whether to upload logs that fail to be parsed.
split_sep	No	String	Delimiter. The maximum length of a custom delimiter is 10 characters, and the maximum length of a custom string is 30 characters.
split_type	No	String	Delimiter type. The value can be <b>char</b> (custom character), <b>special_char</b> (invisible character), or <b>string</b> (custom string).
fields	No	Map<String,String>	List of added fields, in format.
drop_keys	No	Array of strings	List of deleted fields.
source_keys	No	Array of strings	List of source field names for renaming fields.
dest_keys	No	Array of strings	List of field names that are renamed and replaced.
expand_depth	No	Integer	JSON parsing depth. The value ranges from <b>1</b> (default) to <b>4</b> .
expand_connector	No	String	JSON parsing field name connector.
source_format	No	String	Custom time format.
source_value	No	String	Custom time field value.
set_time	No	Boolean	Whether to enable the custom time function.

Parameter	Mandatory	Type	Description
include	No	Map<String,String>	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.
exclude	No	Map<String,String>	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.

## Response Parameters

Status code: 200

Table 6-288 Response body parameters

Parameter	Type	Description
access_config_id	String	Ingestion configuration ID. Minimum: <b>36</b> Maximum: <b>36</b>
access_config_name	String	Ingestion configuration name. Minimum: <b>1</b> Maximum: <b>64</b>
access_config_type	String	Ingestion configuration type. The value <b>AGENT</b> indicates host log ingestion. Enumeration values: <ul style="list-style-type: none"> <li><b>AGENT</b></li> </ul>
create_time	Long	Creation time. Minimum: <b>1</b> Maximum: <b>999999999999999</b>
access_config_detail	<a href="#">AccessConfigDetailCreate</a> object	Ingestion configuration details.
log_info	<a href="#">AccessConfigQueryLogInfo</a> object	Log details.
host_group_info	<a href="#">AccessConfigHostGroupIdList</a> object	Host group ID list.

Parameter	Type	Description
access_config_tag	Array of <a href="#">accessConfigTag</a> objects	Tag information. A tag key must be unique. Up to 20 tags are supported.
log_split	Boolean	Log splitting.
binary_collect	Boolean	Binary collection.
cluster_id	String	CCE cluster ID
encoding_format	String	Encoding format. The default format is UTF-8.
incremental_collect	Boolean	Collection policy. The value can be incremental or full.
processor_type	String	IC structuring parsing type.
demo_log	String	Example log.
demo_fields	Array of <a href="#">DemoFieldAccess</a> objects	Example log parsing field.
processors	Array of <a href="#">Processor</a> objects	IC structuring parser.
application_id	String	ServiceStage application ID.
environment_id	String	ServiceStage environment ID.
component_id	Array of strings	ServiceStage component ID.

**Table 6-289** AccessConfigDeatilCreate

Parameter	Type	Description
paths	Array of strings	<p>Collection paths.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>The container path and host path are mandatory for the CCE type and are not mandatory for the standard output.</p> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>1 - 9</b></p>
black_paths	Array of strings	<p>Collection path blacklist.</p> <ol style="list-style-type: none"> <li>1. The path must start with a slash (/) or <i>Letter</i>.\.</li> <li>2. A path cannot contain only slashes (/). The following special characters are not allowed: &lt;&gt;' ".</li> <li>3. A path cannot start with /** or /*.</li> <li>4. Only one double asterisk (**) can be contained in a path.</li> </ol> <p>Minimum: <b>1</b> Maximum: <b>128</b> Array Length: <b>0 - 9</b></p>
format	<a href="#">AccessConfigFormatCreate</a> object	Log format. Set it to either <b>single</b> or <b>multi</b> .
windows_log_info	<a href="#">AccessConfigWindowsLogInfoCreate</a> object	Windows event logs.
stdout	Boolean	Standard output switch. This parameter is used only when logs are collected from CCE.
stderr	Boolean	Standard error switch. This parameter is used only when logs are collected from CCE.



Parameter	Type	Description
pathType	String	Log collection from CCE. This parameter is used only when logs are collected from CCE. Enumeration values: <ul style="list-style-type: none"> <li>• <b>HOST_FILE</b></li> <li>• <b>CONTAINER_STDOUT</b></li> <li>• <b>CONTAINER_FILE</b></li> </ul>
namespaceRegex	String	Regular expression matching of Kubernetes namespaces. This parameter is used only when logs are collected from CCE.
podNameRegex	String	Regular expression matching of Kubernetes pods. This parameter is used only when logs are collected from CCE.
containerNameRegex	String	Regular expression matching of Kubernetes container names. This parameter is used only when logs are collected from CCE.
includeLabels	Map<String,String >	Container label trustlist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeLabels	Map<String,String >	Container label blacklist. A maximum of 30 container labels can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
includeEnvs	Map<String,String >	Environment variable trustlist. A maximum of 30 environment variable whitelists can be created. Key names must be unique. This parameter is used only when logs are collected from CCE.
excludeEnvs	Map<String,String >	Environment variable blacklist. A maximum of 30 environment variables can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.

Parameter	Type	Description
logLabels	Map<String,String >	Container label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logEnvs	Map<String,String >	Environment variable log tag. A maximum of 30 tags can be created. The key name must be unique. This parameter is used only when logs are collected from CCE.
includeK8sLabels	Map<String,String >	Kubernetes label trustlist. A maximum of 30 whitelists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
excludeK8sLabels	Map<String,String >	Kubernetes label blacklist. A maximum of 30 blocklists can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
logK8s	Map<String,String >	Kubernetes label log tag. A maximum of 30 tags can be created. The key names must be unique. This parameter is used only when logs are collected from CCE.
repeat_collect	Boolean	Forcible repeated collection.

Parameter	Type	Description
system_fields	Array of strings	<p>System built-in fields. When configuring a log ingestion rule, you can specify system fields to include in the tag data of each log reported.</p> <p>The system fields for host log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>category</b>, <b>collectTime</b>, and <b>__host_group__</b>.</p> <p>The system fields for Kubernetes cluster container log files are <b>hostName</b>, <b>hostId</b>, <b>hostIP</b>, <b>pathFile</b>, <b>hostIPv6</b>, <b>clusterId</b>, <b>podName</b>, <b>appName</b>, <b>containerName</b>, <b>namespace</b>, <b>category</b>, <b>collectTime</b>, <b>__host_group__</b>, <b>serviceID</b>, <b>podIp</b>, <b>clusterName</b>, <b>workloadType</b>, and <b>__image_name__</b>.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p> <p>When you configure metadata for the first time, this parameter is mandatory. In this case, <b>["pathFile"]</b> must be entered and other fields are optional.</p>
custom_key_value	Map<String,String >	<p>Custom key-value pairs. When configuring a log ingestion rule, you can configure up to 20 custom key-value pairs to include in the tag data of each log reported.</p> <p>A key can contain up to 128 characters, including letters, digits, hyphens (-), and underscores (_).</p> <p>A value can contain up to 1,024 characters.</p> <p>If this parameter is transferred during modification, the original configuration will be overwritten.</p>
includeLabelsLogical	String	<p>Logic for the container label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.</p>

Parameter	Type	Description
excludeLabelsLogical	String	Logic for the container label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the container label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeK8sLabelsLogical	String	Logic for the Kubernetes label whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeK8sLabelsLogical	String	Logic for the Kubernetes label blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the Kubernetes label blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.
includeEnvsLogical	String	Logic for the environment variable whitelist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable whitelist, AND indicates that the whitelist takes effect only when all the conditions are met, and OR indicates that the whitelist takes effect when one of the conditions is met.
excludeEnvsLogical	String	Logic for the environment variable blacklist to take effect. The value can be <b>AND</b> or <b>OR</b> (default). When there are multiple conditions for the environment variable blacklist, AND indicates that the blacklist takes effect only when all the conditions are met, and OR indicates that the blacklist takes effect when one of the conditions is met.

**Table 6-290** AccessConfigFormatCreate

Parameter	Type	Description
single	<a href="#">AccessConfigFormatSingleCreate</a> object	Single-line logs.
multi	<a href="#">AccessConfigFormatMutilCreate</a> object	Multi-line logs.

**Table 6-291** AccessConfigFormatSingleCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>system</b> indicates the system time, whereas <b>wildcard</b> indicates the time wildcard. Enumeration values: <ul style="list-style-type: none"> <li>• <b>system</b></li> <li>• <b>wildcard</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>system</b> , the value is the current timestamp.If <b>mode</b> is <b>wildcard</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-292** AccessConfigFormatMutilCreate

Parameter	Type	Description
mode	String	Single-line logs. <b>time</b> indicates a time wildcard is used to detect log boundaries, whereas <b>regular</b> indicates that a regular expression is used. Enumeration values: <ul style="list-style-type: none"> <li>• <b>time</b></li> <li>• <b>regular</b></li> </ul>
value	String	Log time.If <b>mode</b> is <b>regular</b> , the value is a regular expression.If <b>mode</b> is <b>time</b> , the value is a time wildcard, which is used by ICAgent to look for the log printing time as the beginning of a log event. If the time format in a log event is <b>2019-01-01 23:59:59</b> , the time wildcard is <b>YYYY-MM-DD hh:mm:ss</b> . If the time format in a log event is <b>19-1-1 23:59:59</b> , the time wildcard is <b>YY-M-D hh:mm:ss</b> . Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-293** AccessConfigWindowsLogInfoCreate

Parameter	Type	Description
categorys	Array of strings	The type of Windows event logs to be collected. <b>Application</b> : application system; <b>System</b> : system; <b>Security</b> : security; <b>Setup</b> : startup Enumeration values: <ul style="list-style-type: none"> <li>• <b>Application</b></li> <li>• <b>System</b></li> <li>• <b>Security</b></li> <li>• <b>Setup</b></li> </ul>
time_offset	<a href="#">AccessConfigTimeOffset</a> object	Time offset.

Parameter	Type	Description
event_level	Array of strings	Event level. information, warning, error, critical, verbose. Array Length: <b>1 - 5</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>information</b></li> <li>• <b>warning</b></li> <li>• <b>error</b></li> <li>• <b>critical</b></li> <li>• <b>verbose</b></li> </ul>

**Table 6-294** AccessConfigTimeOffset

Parameter	Type	Description
offset	Long	Time offset. When <b>unit</b> is <b>day</b> , the value ranges from <b>1</b> to <b>7</b> . When <b>unit</b> is <b>hour</b> , the value ranges from <b>1</b> to <b>168</b> . When <b>unit</b> is <b>sec</b> , the value ranges from <b>1</b> to <b>604800</b> . Minimum: <b>1</b> Maximum: <b>604800</b>
unit	String	Unit of the time offset. day, hour, sec. Enumeration values: <ul style="list-style-type: none"> <li>• <b>day</b></li> <li>• <b>hour</b></li> <li>• <b>sec</b></li> </ul>

**Table 6-295** AccessConfigQueryLogInfo

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>128</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>128</b>

**Table 6-296** AccessConfigHostGroupIdList

Parameter	Type	Description
host_group_id_list	Array of strings	List of host group IDs. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-297** accessConfigTag

Parameter	Type	Description
key	String	Tag key. Minimum: <b>1</b> Maximum: <b>128</b>
value	String	Tag value. Minimum: <b>0</b> Maximum: <b>255</b>

**Table 6-298** DemoFieldAccess

Parameter	Type	Description
field_name	String	Field name, which must be the same as that in keys.
field_value	String	Field value.



**Table 6-299** Processor

Parameter	Type	Description
type	String	Parser type. The value can be <b>processor_regex</b> (regular expression), <b>processor_split_string</b> (delimiter), <b>processor_json</b> (JSON parser), <b>processor_gotime</b> (custom time type), <b>processor_filter_regex</b> (log filtering), <b>processor_drop</b> (type of a deleted field), and <b>processor_rename</b> (type of a deleted field).
detail	<b>Detail</b> object	Parser configuration.

**Table 6-300** Detail

Parameter	Type	Description
source_key	String	Custom time key field name.
regex	String	Regular expression for parsing. This field is required for a single-line completely regular expression or a multi-line completely regular expression.
keys	Array of strings	Field name list, which is consistent with the field_name field.
multi_line_regex	String	First line regular expression.
keep_source	Boolean	Whether to upload raw logs.
keep_source_if_parse_error	Boolean	Whether to upload logs that fail to be parsed.
split_sep	String	Delimiter. The maximum length of a custom delimiter is 10 characters, and the maximum length of a custom string is 30 characters.
split_type	String	Delimiter type. The value can be <b>char</b> (custom character), <b>special_char</b> (invisible character), or <b>string</b> (custom string).
fields	Map<String,String>	List of added fields, in format.
drop_keys	Array of strings	List of deleted fields.
source_keys	Array of strings	List of source field names for renaming fields.

Parameter	Type	Description
dest_keys	Array of strings	List of field names that are renamed and replaced.
expand_depth	Integer	JSON parsing depth. The value ranges from <b>1</b> (default) to <b>4</b> .
expand_connector	String	JSON parsing field name connector.
source_format	String	Custom time format.
source_value	String	Custom time field value.
set_time	Boolean	Whether to enable the custom time function.
include	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.
exclude	Map<String,String >	A key of a log filtering whitelist rule can contain up to 256 characters, and a value can contain up to 128 characters. A key must be unique.

**Status code: 400**

**Table 6-301** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

**Status code: 500**

**Table 6-302** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error description Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

### Modifying a Log Ingestion Configuration (for ECS)

PUT https://{endpoint}/v3/{project\_id}/lts/access-config

```
{
  "access_config_id" : "ed90802a-8475-4702-955e-e3ee16a5dde9",
  "access_config_detail" : {
    "paths" : [ "/test/222", "/test/111" ],
    "black_paths" : [ ],
    "format" : {
      "multi" : {
        "mode" : "regular",
        "value" : "aaaa"
      }
    },
    "windows_log_info" : {
      "categorys" : [ "Application", "System" ],
      "time_offset" : {
        "offset" : 7,
        "unit" : "day"
      },
      "event_level" : [ "information", "warning", "error", "critical", "verbose" ]
    }
  },
  "host_group_info" : {
    "host_group_id_list" : [ "de4dbed4-a3bc-4877-a7ee-096a2a63e036" ]
  },
  "access_config_tag" : [ {
    "key" : "xxx",
    "value" : "xxx"
  }, {
    "key" : "xxx1",
    "value" : "xxx1"
  } ]
}
```

## Example Responses

**Status code: 200**

Ingestion configuration modified.

```
{
  "access_config_detail" : {
    "black_paths" : [ "/wjy/hei/tesxxx", "/wjy/hei/tesxxx" ],
    "format" : {
      "single" : {
```

```
"mode": "wildcard",
"value": "1111"
}
},
"paths": [ "/wjy/tesxxx" ],
"windows_log_info": {
"categorys": [ "System", "Application", "Security", "Setup" ],
"event_level": [ "information", "warning", "error", "critical", "verbose" ],
"time_offset": {
"offset": 168,
"unit": "hour"
}
}
},
"access_config_id": "aa58d29e-21a9-4761-ba16-8cxxxxd",
"access_config_name": "CollectionWjy_xxxx2",
"access_config_tag": [ {
"key": "xxx",
"value": "xxx"
}, {
"key": "xxx1",
"value": "xxx1"
} ],
"access_config_type": "AGENT",
"create_time": 163504332654,
"host_group_info": {
"host_group_id_list": [ "de4dbed4-a3bc-4877-a7ee-09xxxxxx" ]
},
"log_info": {
"log_group_id": "9a7e2183-2d6d-4732-9axxxx49e0",
"log_group_name": "lts-groupxxxa",
"log_stream_id": "c4de0538-53e6-41fd-b951-xxxx8d7",
"log_stream_name": "lts-topixxx"
}
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
"error_code": "LTS.1807",
"error_msg": "Invalid access config id"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
"error_code": "LTS.0010",
"error_msg": "The system encountered an internal error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Modifying a Log Ingestion Configuration (for ECS)

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
```

```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateAccessConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();

        UpdateAccessConfigRequest request = new UpdateAccessConfigRequest();
        UpdateAccessConfigRequestBody body = new UpdateAccessConfigRequestBody();
        List<AccessConfigTag> listbodyAccessConfigTag = new ArrayList<>();
        listbodyAccessConfigTag.add(
            new AccessConfigTag()
                .withKey("xxx")
                .withValue("xxx")
        );
        listbodyAccessConfigTag.add(
            new AccessConfigTag()
                .withKey("xxx1")
                .withValue("xxx1")
        );
        List<String> listHostGroupInfoHostGroupIdList = new ArrayList<>();
        listHostGroupInfoHostGroupIdList.add("de4dbed4-a3bc-4877-a7ee-096a2a63e036");
        AccessConfigHostGroupInfo hostGroupInfobody = new AccessConfigHostGroupInfoList();
        hostGroupInfobody.withHostGroupIdList(listHostGroupInfoHostGroupIdList);
        List<AccessConfigWindowsLogInfoUpdate.EventLevelEnum> listWindowsLogInfoEventLevel = new
        ArrayList<>();

        listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoUpdate.EventLevelEnum.fromValue("inform
        ation"));

        listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoUpdate.EventLevelEnum.fromValue("warnin
        g"));

        listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoUpdate.EventLevelEnum.fromValue("error")
        );

        listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoUpdate.EventLevelEnum.fromValue("critical
        "));

        listWindowsLogInfoEventLevel.add(AccessConfigWindowsLogInfoUpdate.EventLevelEnum.fromValue("verbos
        e"));

        AccessConfigTimeOffsetCreate timeOffsetWindowsLogInfo = new AccessConfigTimeOffsetCreate();
        timeOffsetWindowsLogInfo.withOffset(7L)
            .withUnit(AccessConfigTimeOffsetCreate.UnitEnum.fromValue("day"));
        List<AccessConfigWindowsLogInfoUpdate.CategoryEnum> listWindowsLogInfoCategorys = new
```

```
ArrayList<>());

listWindowsLogInfoCategorys.add(AccessConfigWindowsLogInfoUpdate.CategorysEnum.fromValue("Application"));

listWindowsLogInfoCategorys.add(AccessConfigWindowsLogInfoUpdate.CategorysEnum.fromValue("System"));
    AccessConfigWindowsLogInfoUpdate windowsLogInfoAccessConfigDetail = new
AccessConfigWindowsLogInfoUpdate();
    windowsLogInfoAccessConfigDetail.withCategorys(listWindowsLogInfoCategorys)
        .withTimeOffset(timeOffsetWindowsLogInfo)
        .withEventLevel(listWindowsLogInfoEventLevel);
    AccessConfigFormatMutil multiFormat = new AccessConfigFormatMutil();
    multiFormat.withMode(AccessConfigFormatMutil.ModeEnum.fromValue("regular"))
        .withValue("aaaa");
    AccessConfigFormatUpdate formatAccessConfigDetail = new AccessConfigFormatUpdate();
    formatAccessConfigDetail.withMulti(multiFormat);
    List<String> listAccessConfigDetailPaths = new ArrayList<>();
    listAccessConfigDetailPaths.add("/test/222");
    listAccessConfigDetailPaths.add("/test/111");
    AccessConfigDeatilUpdate accessConfigDetailbody = new AccessConfigDeatilUpdate();
    accessConfigDetailbody.withPaths(listAccessConfigDetailPaths)
        .withFormat(formatAccessConfigDetail)
        .withWindowsLogInfo(windowsLogInfoAccessConfigDetail);
    body.withAccessConfigTag(listbodyAccessConfigTag);
    body.withHostGroupInfo(hostGroupInfobody);
    body.withAccessConfigDetail(accessConfigDetailbody);
    body.withAccessConfigId("ed90802a-8475-4702-955e-e3ee16a5dde9");
    request.withBody(body);
    try {
        UpdateAccessConfigResponse response = client.updateAccessConfig(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Modifying a Log Ingestion Configuration (for ECS)

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)
```

```
client = LtsClient.new_builder() \  
  .with_credentials(credentials) \  
  .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
  .build()  
  
try:  
  request = UpdateAccessConfigRequest()  
  listAccessConfigTagbody = [  
    AccessConfigTag(  
      key="xxx",  
      value="xxx"  
    ),  
    AccessConfigTag(  
      key="xxx1",  
      value="xxx1"  
    )  
  ]  
  listHostGroupIdListHostGroupInfo = [  
    "de4dbed4-a3bc-4877-a7ee-096a2a63e036"  
  ]  
  hostGroupInfobody = AccessConfigHostGroupIdList(  
    host_group_id_list=listHostGroupIdListHostGroupInfo  
  )  
  listEventLevelWindowsLogInfo = [  
    "information",  
    "warning",  
    "error",  
    "critical",  
    "verbose"  
  ]  
  timeOffsetWindowsLogInfo = AccessConfigTimeOffsetCreate(  
    offset=7,  
    unit="day"  
  )  
  listCategorysWindowsLogInfo = [  
    "Application",  
    "System"  
  ]  
  windowsLogInfoAccessConfigDetail = AccessConfigWindowsLogInfoUpdate(  
    categorys=listCategorysWindowsLogInfo,  
    time_offset=timeOffsetWindowsLogInfo,  
    event_level=listEventLevelWindowsLogInfo  
  )  
  multiFormat = AccessConfigFormatMutil(  
    mode="regular",  
    value="aaaa"  
  )  
  formatAccessConfigDetail = AccessConfigFormatUpdate(  
    multi=multiFormat  
  )  
  listPathsAccessConfigDetail = [  
    "/test/222",  
    "/test/111"  
  ]  
  accessConfigDetailbody = AccessConfigDeatilUpdate(  
    paths=listPathsAccessConfigDetail,  
    format=formatAccessConfigDetail,  
    windows_log_info=windowsLogInfoAccessConfigDetail  
  )  
  request.body = UpdateAccessConfigRequestBody(  
    access_config_tag=listAccessConfigTagbody,  
    host_group_info=hostGroupInfobody,  
    access_config_detail=accessConfigDetailbody,  
    access_config_id="ed90802a-8475-4702-955e-e3ee16a5dde9"  
  )  
  response = client.update_access_config(request)  
  print(response)  
except exceptions.ClientRequestException as e:
```

```
print(e.status_code)
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

## Go

### Modifying a Log Ingestion Configuration (for ECS)

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateAccessConfigRequest{}
    keyAccessConfigTag := "xxx"
    valueAccessConfigTag := "xxx"
    keyAccessConfigTag1 := "xxx1"
    valueAccessConfigTag1 := "xxx1"
    var listAccessConfigTagbody = []model.AccessConfigTag{
        {
            Key: &keyAccessConfigTag,
            Value: &valueAccessConfigTag,
        },
        {
            Key: &keyAccessConfigTag1,
            Value: &valueAccessConfigTag1,
        },
    }
    var listHostGroupIdListHostGroupInfo = []string{
        "de4dbed4-a3bc-4877-a7ee-096a2a63e036",
    }
    hostGroupInfobody := &model.AccessConfigHostGroupIdList{
        HostGroupIdList: listHostGroupIdListHostGroupInfo,
    }
    var listEventLevelWindowsLogInfo = []model.AccessConfigWindowsLogInfoUpdateEventLevel{
        model.GetAccessConfigWindowsLogInfoUpdateEventLevelEnum().INFORMATION,
        model.GetAccessConfigWindowsLogInfoUpdateEventLevelEnum().WARNING,
        model.GetAccessConfigWindowsLogInfoUpdateEventLevelEnum().ERROR,
        model.GetAccessConfigWindowsLogInfoUpdateEventLevelEnum().CRITICAL,
        model.GetAccessConfigWindowsLogInfoUpdateEventLevelEnum().VERBOSE,
    }
}
```



```

timeOffsetWindowsLogInfo := &model.AccessConfigTimeOffsetCreate{
    Offset: int64(7),
    Unit: model.GetAccessConfigTimeOffsetCreateUnitEnum().DAY,
}
var listCategorysWindowsLogInfo = []model.AccessConfigWindowsLogInfoUpdateCategorys{
    model.GetAccessConfigWindowsLogInfoUpdateCategorysEnum().APPLICATION,
    model.GetAccessConfigWindowsLogInfoUpdateCategorysEnum().SYSTEM,
}
windowsLogInfoAccessConfigDetail := &model.AccessConfigWindowsLogInfoUpdate{
    Categorys: &listCategorysWindowsLogInfo,
    TimeOffset: timeOffsetWindowsLogInfo,
    EventLevel: &listEventLevelWindowsLogInfo,
}
multiFormat := &model.AccessConfigFormatMutil{
    Mode: model.GetAccessConfigFormatMutilModeEnum().REGULAR,
    Value: "aaaa",
}
formatAccessConfigDetail := &model.AccessConfigFormatUpdate{
    Multi: multiFormat,
}
var listPathsAccessConfigDetail = []string{
    "/test/222",
    "/test/111",
}
accessConfigDetailbody := &model.AccessConfigDeatilUpdate{
    Paths: &listPathsAccessConfigDetail,
    Format: formatAccessConfigDetail,
    WindowsLogInfo: windowsLogInfoAccessConfigDetail,
}
request.Body = &model.UpdateAccessConfigRequestBody{
    AccessConfigTag: &listAccessConfigTagbody,
    HostGroupInfo: hostGroupInfobody,
    AccessConfigDetail: accessConfigDetailbody,
    AccessConfigId: "ed90802a-8475-4702-955e-e3ee16a5dde9",
}
response, err := client.UpdateAccessConfig(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Ingestion configuration modified.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.6 Log Transfer

## 6.6.1 Creating a Log Transfer Task (Old Version)

### Function

This API is used to transfer logs of one or more specified log streams to Object Storage Service (OBS).

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/log-dump/obs

**Table 6-303** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

### Request Parameters

**Table 6-304** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-305** Request body parameters

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_ids	Yes	Array of strings	Indicates IDs of log streams whose logs are to be periodically transferred to OBS. You can specify one or more log streams.
obs_bucket_name	Yes	String	Name of an OBS bucket. Minimum: <b>3</b> Maximum: <b>63</b>
type	Yes	String	Set this parameter to <b>cycle</b> , which indicates that the log transfer is periodic. Minimum: <b>5</b> Maximum: <b>5</b>
storage_format	Yes	String	Whether the logs are stored in raw or JSON format. The default value is <b>RAW</b> . Minimum length: 3 characters. Maximum length: 4 characters.
switch_on	No	Boolean	Whether log transfer is enabled. The value is <b>true</b> (default) or <b>false</b> .
prefix_name	No	String	The file name prefix of the log files transferred to an OBS bucket. Minimum: <b>0</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
dir_prefix_name	No	String	A custom path to store the log files. Minimum: <b>0</b> Maximum: <b>64</b>
period	Yes	Integer	Length of the log transfer interval. Enumeration values: <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 30</li> </ul>
period_unit	Yes	String	Unit of the log transfer interval.>The combination of <b>period</b> and <b>period_unit</b> must be one of ["2min", "5min", "30min", "1hour", "3hour", "6hour", "12hour"]. Minimum: <b>3</b> Maximum: <b>4</b> Enumeration values: <ul style="list-style-type: none"> <li>• "min"</li> <li>• "hour"</li> </ul>

## Response Parameters

Status code: 201

Table 6-306 Response body parameters

Parameter	Type	Description
log_dump_obs_id	String	Transfer task ID. Default: <b>None</b> Minimum: <b>36</b> Maximum: <b>36</b>

Status code: 400

**Table 6-307** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0007</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>The request body format must be json</b></li> </ul>

**Status code: 403**

**Table 6-308** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-309** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Creating a log transfer task

```
POST https://{endpoint}/v2/{project_id}/log-dump/obs
```

```
{
  "log_group_id": "d9dba9f3-xxxx-48bd-xxxx-xxxxa24a8053",
  "log_stream_ids": [ "45e7f609-xxxx-4cd3-835b-xxxx4a124718" ],
  "obs_bucket_name": "lts-test",
  "type": "cycle",
  "storage_format": "RAW",
  "switch_on": "true",
  "prefix_name": "fileprefixname",
  "dir_prefix_name": "dirprefixname",
  "period": 5,
  "period_unit": "min"
}
```

## Example Responses

### Status code: 200

The request is successful.

- The log group does not exist.

```
{
  "error_code": "LTS.0201",
  "error_msg": "The log group does not existed"
}
```

- The log stream does not exist.

```
{
  "error_code": "LTS.0208",
  "error_msg": "Log stream id does not exist: 632b9bdc-5afd-4666-a5de-2579f8b80314-"
}
```

- The OBS bucket does not exist.

```
{
  "error_code": "LTS.0416",
  "error_msg": "obs bucket does not exist: zhuanchu"
}
```

- The log stream ID has been associated during log transfer.

```
{
  "error_code": "LTS.0207",
  "error_msg": "Log stream id is associated by transfer: 632b9bdc-5afd-4666-a5de-2579f8b80314"
}
```

- The transfer type is not in the list.

```
{
  "error_code": "LTS.1901",
  "error_msg": "type is not in the list [cycle]"
}
```

- The transfer format is not in the list.

```
{
  "error_code": "LTS.1901",
  "error_msg": "storage_format is not in the list [RAW, JSON]"
}
```

- The transfer interval is not in the list.

```
{
  "error_code": "LTS.1901",
  "error_msg": "period+period_unit is not in the list [2min, 5min, 30min, 1hour, 3hour, 6hour, 12hour]"
}
```

- The transfer unit is not in the list.

```
{
  "error_code": "LTS.1901",
  "error_msg": "period_unit is not in the list [min, hour]"
}
```

- The prefix of the transferred log file is invalid. Check the prefix.

```
{
  "error_code": "LTS.1902",
  "error_msg": "prefix_name is invalid, please verify if it's provided as required"
}
```

- The prefix of the user-defined transfer path is invalid. Check the prefix.

```
{
  "error_code": "LTS.1902",
  "error_msg": "dir_prefix_name is invalid, please verify if it's provided as required"
}
```

### Status code: 201

The request is successful.

```
{
  "log_dump_obs_id": "45fdc36b-xxxx-4567-xxxx-559xxxxdf968"
}
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.0007",
  "error_msg": "The request body format must be json"
}
```

### Status code: 403

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code": "LTS.0001",
  "error_msg": "Invalid projectId"
}
```

### Status code: 500

InternalServerError.

The server has received the request but encountered an internal error.

InternalServerError. The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0010",
  "error_msg": "Internal Server Error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a log transfer task

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
```

```
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateLogDumpObsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();

        CreateLogDumpObsRequest request = new CreateLogDumpObsRequest();
        CreateLogDumpObsRequestBody body = new CreateLogDumpObsRequestBody();
        List<String> listbodyLogStreamIds = new ArrayList<>();
        listbodyLogStreamIds.add("45e7f609-xxxx-4cd3-835b-xxxx4a124718");
        body.withPeriodUnit("min");
        body.withPeriod(5);
        body.withDirPrefixName("dirprefixname");
        body.withPrefixName("fileprefixname");
        body.withSwitchOn(true);
        body.withStorageFormat("RAW");
        body.withType("cycle");
        body.withObsBucketName("lts-test");
        body.withLogStreamIds(listbodyLogStreamIds);
        body.withLogGroupId("d9dba9f3-xxxx-48bd-xxxx-xxxxa24a8053");
        request.withBody(body);
        try {
            CreateLogDumpObsResponse response = client.createLogDumpObs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

Creating a log transfer task



```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateLogDumpObsRequest()
        listLogStreamIdsbody = [
            "45e7f609-xxxx-4cd3-835b-xxxx4a124718"
        ]
        request.body = CreateLogDumpObsRequestBody(
            period_unit="min",
            period=5,
            dir_prefix_name="dirprefixname",
            prefix_name="fileprefixname",
            switch_on=True,
            storage_format="RAW",
            type="cycle",
            obs_bucket_name="lts-test",
            log_stream_ids=listLogStreamIdsbody,
            log_group_id="d9dba9f3-xxxx-48bd-xxxx-xxxxa24a8053"
        )
        response = client.create_log_dump_obs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Creating a log transfer task

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
```

```

example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateLogDumpObsRequest{}
var listLogStreamIdsbody = []string{
    "45e7f609-xxxx-4cd3-835b-xxxx4a124718",
}
dirPrefixNameCreateLogDumpObsRequestBody:= "dirprefixname"
prefixNameCreateLogDumpObsRequestBody:= "fileprefixname"
switchOnCreateLogDumpObsRequestBody:= true
request.Body = &model.CreateLogDumpObsRequestBody{
    PeriodUnit: "min",
    Period: int32(5),
    DirPrefixName: &dirPrefixNameCreateLogDumpObsRequestBody,
    PrefixName: &prefixNameCreateLogDumpObsRequestBody,
    SwitchOn: &switchOnCreateLogDumpObsRequestBody,
    StorageFormat: "RAW",
    Type: "cycle",
    ObsBucketName: "lts-test",
    LogStreamIds: listLogStreamIdsbody,
    LogGroupId: "d9dba9f3-xxxx-48bd-xxxx-xxxxa24a8053",
}
response, err := client.CreateLogDumpObs(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
201	The request is successful.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

Status Code	Description
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.6.2 Creating a Log Transfer Task (New Version)

### Function

This API is used to transfer logs to OBS, DIS, and DMS.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/transfers

**Table 6-310** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-311** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-312** Request body parameters

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Log group ID. Minimum length: 36 characters. Maximum length: 36 characters Minimum: <b>36</b> Maximum: <b>36</b>
log_streams	Yes	Array of <a href="#">LogStreams</a> objects	Log stream list.
log_transfer_info	Yes	<a href="#">log_transfer_info</a> object	Log transfer information.

**Table 6-313** LogStreams

Parameter	Mandatory	Type	Description
log_stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
log_stream_name	No	String	Log stream name.

**Table 6-314** log\_transfer\_info

Parameter	Mandatory	Type	Description
log_transfer_type	Yes	String	Log transfer type. You can transfer logs to OBS, DIS, and DMS.
log_transfer_mode	Yes	String	Log transfer mode. <b>cycle</b> indicates periodical transfer, and <b>realTime</b> indicates real-time transfer. <b>cycle</b> is available to OBS transfer tasks and <b>realTime</b> is available to DIS and DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>cycle</b></li> <li>• <b>realTime</b></li> </ul>
log_storage_format	Yes	String	Log transfer format. The value can be <b>RAW</b> or <b>JSON</b> . <b>RAW</b> indicates the raw log format, and <b>JSON</b> indicates the JSON format. Enumeration values: <ul style="list-style-type: none"> <li>• <b>JSON</b></li> <li>• <b>RAW</b></li> </ul>
log_transfer_status	Yes	String	Log transfer status. The value can be <b>ENABLE</b> , <b>DISABLE</b> , or <b>EXCEPTION</b> . <b>ENABLE</b> indicates that log transfer is enabled, <b>DISABLE</b> indicates that log transfer is disabled, and <b>EXCEPTION</b> indicates that log transfer is abnormal. Enumeration values: <ul style="list-style-type: none"> <li>• <b>ENABLE</b></li> <li>• <b>DISABLE</b></li> <li>• <b>EXCEPTION</b></li> </ul>

Parameter	Mandatory	Type	Description
log_agency_transfer	No	<a href="#">log_agency_transfer</a> object	Information about delegated log transfer. This parameter is required if you transfer logs for another account.
log_transfer_detail	Yes	<a href="#">log_transfer_detail</a> object	Log transfer details.

**Table 6-315** log\_agency\_transfer

Parameter	Mandatory	Type	Description
agency_domain_id	Yes	String	Delegator account ID. Minimum: <b>1</b> Maximum: <b>128</b>
agency_domain_name	Yes	String	Delegator account name. Minimum: <b>1</b> Maximum: <b>128</b>
agency_name	Yes	String	Name of the agency created by the delegator. Minimum: <b>1</b> Maximum: <b>128</b>
agency_project_id	Yes	String	Project ID of the delegator. Minimum: <b>32</b> Maximum: <b>32</b>
be_agency_domain_id	Yes	String	Account ID of the delegated party (ID of the account that created the log transfer task). Minimum: <b>1</b> Maximum: <b>128</b>
be_agency_project_id	Yes	String	Project ID of the delegated party (project ID of the account that created the log transfer task). Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-316** log\_transfer\_detail

Parameter	Mandatory	Type	Description
obs_period	Yes	Integer	<p>Length of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 30</li> </ul>
obs_period_unit	Yes	String	<p>Unit of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• min</li> <li>• hour</li> </ul>
obs_bucket_name	Yes	String	<p>OBS bucket name. This parameter is required when you create an OBS transfer task.</p> <p>Minimum: 3 Maximum: 63</p>

Parameter	Mandatory	Type	Description
obs_encrypted_id	No	String	KMS key ID for an OBS transfer task. Required if encryption is enabled for the target OBS bucket. Minimum: <b>36</b> Maximum: <b>36</b>
obs_dir_prefix_name	No	String	Custom transfer path of an OBS transfer task. This parameter is optional. Minimum: <b>1</b> Maximum: <b>64</b>
obs_prefix_name	No	String	Transfer file prefix of an OBS transfer task. This parameter is optional. Minimum: <b>1</b> Maximum: <b>64</b>
obs_time_zone	No	String	Time zone for an OBS transfer task. For details, see Time Zone List for OBS Transfer. If this parameter is specified, <b>obs_time_zone_id</b> must also be specified.
obs_time_zone_id	No	String	ID of the time zone for an OBS transfer task. For details, see Time Zone List for OBS Transfer. If this parameter is specified, <b>obs_time_zone</b> must also be specified.
dis_id	No	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum: <b>1</b> Maximum: <b>128</b>
dis_name	No	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum: <b>1</b> Maximum: <b>64</b>



Parameter	Mandatory	Type	Description
kafka_id	No	String	Kafka ID of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance.
kafka_topic	No	String	Kafka topic of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance.
obs_eps_id	No	String	Enterprise project ID of an OBS transfer task.
obs_encrypted_enable	No	Boolean	Whether OBS bucket encryption is enabled.
tags	No	Array of strings	If tag delivery is enabled, this field must contain the following host information: <b>hostIP</b> , <b>hostId</b> , <b>hostName</b> , <b>pathFile</b> , and <b>collectTime</b> . The common fields are <b>logStreamName</b> , <b>regionName</b> , <b>logGroupName</b> , and <b>projectId</b> , which are optional. The tag for enabling transfer is <b>streamTag</b> , which is optional.
lts_tags	No	Array of strings	Whether to transfer the tag field. This parameter is optional when the JSON format is selected for DMS transfer.
stream_tags	No	Array of strings	Whether to transfer the log stream tag field. This parameter is optional when the JSON format is selected for DMS transfer.

Parameter	Mandatory	Type	Description
struct_fields	No	Array of strings	Whether to transfer the structured fields. This parameter is optional when the JSON format is selected for DMS transfer.
invalid_field_value	No	String	Whether to enable the invalid field fill function. This parameter is optional when the JSON format is selected for DMS transfer.

## Response Parameters

Status code: 200

Table 6-317 Response body parameters

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_streams	Array of <a href="#">log_streams</a> objects	Log stream list.
log_transfer_id	String	Log transfer task ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_transfer_info	<a href="#">log_transfer_info_RespBody</a> object	Log transfer information.

Table 6-318 log\_streams

Parameter	Type	Description
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-319** log\_transfer\_info\_RespBody

Parameter	Type	Description
log_agency_transf er	<b>log_agency_trans fer</b> object	Information about delegated log transfer. This parameter is returned for a delegated log transfer task.
log_create_time	Integer	Time when the log transfer task was created. Minimum: <b>0</b> Maximum: <b>2147483647</b>
log_storage_form at	String	Log transfer format. The value can be <b>RAW</b> or <b>JSON</b> . <b>RAW</b> indicates the raw log format, and <b>JSON</b> indicates the JSON format. <b>JSON</b> and <b>RAW</b> are supported for OBS and DIS transfer tasks, but only <b>RAW</b> is supported for DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>JSON</b></li> <li>• <b>RAW</b></li> </ul>
log_transfer_detail	<b>TransferDetail</b> object	Log transfer details.
log_transfer_mod e	String	Log transfer mode. <b>cycle</b> indicates periodical transfer, and <b>realTime</b> indicates real-time transfer. <b>cycle</b> is available to OBS transfer tasks and <b>realTime</b> is available to DIS and DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>cycle</b></li> <li>• <b>realTime</b></li> </ul>

Parameter	Type	Description
log_transfer_statuses	String	Log transfer status. <b>ENABLE</b> indicates that log transfer is enabled, <b>DISABLE</b> indicates that log transfer is disabled, and <b>EXCEPTION</b> indicates that log transfer is abnormal. Enumeration values: <ul style="list-style-type: none"> <li>• <b>ENABLE</b></li> <li>• <b>DISABLE</b></li> <li>• <b>EXCEPTION</b></li> </ul>
log_transfer_type	String	Log transfer type. You can transfer logs to OBS, DIS, and DMS. Enumeration values: <ul style="list-style-type: none"> <li>• <b>OBS</b></li> <li>• <b>DIS</b></li> <li>• <b>DMS</b></li> </ul>

**Table 6-320** log\_agency\_transfer

Parameter	Type	Description
agency_domain_id	String	Delegator account ID. Minimum: <b>1</b> Maximum: <b>128</b>
agency_domain_name	String	Delegator account name. Minimum: <b>1</b> Maximum: <b>128</b>
agency_name	String	Name of the agency created by the delegator. Minimum: <b>1</b> Maximum: <b>128</b>
agency_project_id	String	Project ID of the delegator. Minimum: <b>32</b> Maximum: <b>32</b>
be_agency_domain_id	String	Account ID of the delegated party (ID of the account that created the log transfer task). Minimum: <b>1</b> Maximum: <b>128</b>

Parameter	Type	Description
be_agency_project_id	String	Project ID of the delegated party (project ID of the account that created the log transfer task). Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-321** TransferDetail

Parameter	Type	Description
obs_period	Integer	Length of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b> , and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours. Enumeration values: <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 30</li> </ul>
obs_period_unit	String	Unit of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b> , and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours. Enumeration values: <ul style="list-style-type: none"> <li>• "min"</li> <li>• "hour"</li> </ul>

Parameter	Type	Description
obs_bucket_name	String	OBS log bucket name. This parameter is required when you create an OBS transfer task. Minimum length: 3 characters. Maximum length: 63 characters. Minimum: <b>3</b> Maximum: <b>63</b>
obs_encrypted_id	String	KMS key ID for an OBS transfer task. Required if encryption is enabled for the target OBS bucket. Minimum length: 36 characters. Maximum length: 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>
obs_dir_pre_fix_name	String	Custom transfer path of an OBS transfer task. This parameter is optional. The value must match the regular expression: ^(/)?([a-zA-Z0-9.-]+)(/[a-zA-Z0-9.-]+)*(/)?\$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_prefix_name	String	Transfer file prefix of an OBS transfer task. This parameter is optional. The value must match the regular expression: ^[a-zA-Z0-9._]*\$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_time_zone	String	Time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone_id</b> must also be specified.

Parameter	Type	Description
obs_time_zone_id	String	ID of the time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone</b> must also be specified.
dis_id	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
dis_name	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
kafka_id	String	Kafka ID of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>36</b> Maximum: <b>36</b>
kafka_topic	String	Kafka topic of a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>1</b> Maximum: <b>128</b>
obs_transfer_path	String	OBS bucket path, which is the log transfer destination. Minimum: <b>0</b> Maximum: <b>256</b>

Parameter	Type	Description
obs_eps_id	String	Enterprise project ID of an OBS transfer task. Minimum: <b>0</b> Maximum: <b>128</b>
obs_encrypted_able	Boolean	Whether OBS bucket encryption is enabled. Enumeration values: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>
tags	Array of strings	If tag delivery is enabled, this field must contain the following host information: <b>hostIP</b> , <b>hostId</b> , <b>hostName</b> , <b>pathFile</b> , and <b>collectTime</b> . The common fields include <b>logStreamName</b> , <b>regionName</b> , <b>logGroupName</b> and <b>projectId</b> , which are optional. The transfer tag <b>streamTag</b> is optional.

**Status code: 400**

**Table 6-322** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-323** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>



Parameter	Type	Description
error_msg	String	Error message.

## Example Requests

- Transferring logs to OBS

POST https://{endpoint}/v2/{project\_id}/transfers

```
{
  "log_group_id": "8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxx",
  "log_streams": [ {
    "log_stream_id": "c776e1a7-8548-430a-afe5-xxxxxxxxxxxx"
  } ],
  "log_transfer_info": {
    "log_transfer_type": "OBS",
    "log_transfer_mode": "xxxxx",
    "log_storage_format": "XXX",
    "log_transfer_status": "XXXXX",
    "log_agency_transfer": {
      "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "agency_domain_name": "paas_apm_z004xxxxx_xx",
      "agency_name": "test20210325",
      "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",
      "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"
    },
    "log_transfer_detail": {
      "obs_period": 2,
      "obs_period_unit": "min",
      "obs_bucket_name": "xxxxx",
      "obs_encrypted_id": "1bd90032-1424-481f-8558-ba49854xxxxx",
      "obs_dir_pre_fix_name": "/xx",
      "obs_prefix_name": "xxxxx",
      "obs_time_zone": "UTC+01:00",
      "obs_time_zone_id": "Africa/Lagos"
    }
  }
}
```

- Creating a DIS transfer task

POST https://{endpoint}/v2/{project\_id}/transfers

```
{
  "log_group_id": "8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxx",
  "log_streams": [ {
    "log_stream_id": "c776e1a7-8548-430a-afe5-xxxxxxxxxxxx"
  } ],
  "log_transfer_info": {
    "log_transfer_type": "DIS",
    "log_transfer_mode": "xxxxx",
    "log_storage_format": "XXX",
    "log_transfer_status": "XXXXX",
    "log_agency_transfer": {
      "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "agency_domain_name": "paas_apm_z004xxxxx_xx",
      "agency_name": "test20210325",
      "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",
      "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"
    },
    "log_transfer_detail": {
      "dis_id": "i1y8vMTvf4LQzxxxxx",
      "dis_name": "xxxxx"
    }
  }
}
```

```
}  
}
```

## Example Responses

### Status code: 200

The log transfer task is created.

- The following parameters are returned for an OBS transfer task:

```
{  
  "log_group_id": "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",  
  "log_group_name": "lts-group-kafka",  
  "log_streams": [ {  
    "log_stream_id": "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",  
    "log_stream_name": "lts-topic-kafka"  
  } ],  
  "log_transfer_id": "ddced522-233a-4181-a5fc-7b458c819afc",  
  "log_transfer_info": {  
    "log_create_time": 1634802241847,  
    "log_storage_format": "JSON",  
    "log_agency_transfer": {  
      "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",  
      "agency_domain_name": "paas_apm_z004xxxxx_xx",  
      "agency_name": "test20210325",  
      "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",  
      "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",  
      "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"  
    },  
    "log_transfer_detail": {  
      "obs_period": 2,  
      "obs_prefix_name": "",  
      "obs_period_unit": "min",  
      "obs_transfer_path": "/0002/LogTanks/cn-north-7/",  
      "obs_bucket_name": "0002",  
      "obs_encrypted_enable": false,  
      "obs_dir_pre_fix_name": "",  
      "obs_time_zone": "UTC+01:00",  
      "obs_time_zone_id": "Africa/Lagos",  
      "tags": [ ]  
    },  
    "log_transfer_mode": "cycle",  
    "log_transfer_status": "ENABLE",  
    "log_transfer_type": "OBS"  
  }  
}
```

- The following parameters are returned for a DIS transfer task:

```
{  
  "log_group_id": "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",  
  "log_group_name": "lts-group-kafka",  
  "log_streams": [ {  
    "log_stream_id": "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",  
    "log_stream_name": "lts-topic-kafka"  
  } ],  
  "log_transfer_id": "ddced522-233a-4181-a5fc-7b458c819afc",  
  "log_transfer_info": {  
    "log_create_time": 1634802241847,  
    "log_storage_format": "JSON",  
    "log_agency_transfer": {  
      "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",  
      "agency_domain_name": "paas_apm_z004xxxxx_xx",  
      "agency_name": "test20210325",  
      "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",  
      "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",  
      "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"  
    },  
    "log_transfer_detail": {
```

```
"dis_id": "xxxxx",
"dis_name": "xxxxxx",
"tags": [ ]
},
"log_transfer_mode": "cycle",
"log_transfer_status": "ENABLE",
"log_transfer_type": "OBS"
}
}
```

- The following parameters are returned for a DMS transfer task:

```
{
  "log_group_id": "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
  "log_group_name": "lts-group-kafka",
  "log_streams": [ {
    "log_stream_id": "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
    "log_stream_name": "lts-topic-kafka"
  } ],
  "log_transfer_id": "ddced522-233a-4181-a5fc-7b458c819afc",
  "log_transfer_info": {
    "log_create_time": 1634802241847,
    "log_storage_format": "JSON",
    "log_agency_transfer": {
      "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "agency_domain_name": "paas_apm_z004xxxxx_xx",
      "agency_name": "test20210325",
      "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",
      "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"
    },
    "log_transfer_detail": {
      "kafka_id": "xxxxxx",
      "kafka_topic": "xxxxx",
      "tags": [ ]
    },
    "log_transfer_mode": "cycle",
    "log_transfer_status": "ENABLE",
    "log_transfer_type": "OBS"
  }
}
```

#### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.0207",
  "error_msg": "The log stream is associated by transfer"
}
```

#### Status code: 500

InternalServerError. The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0207",
  "error_msg": "The log stream is associated by transfer"
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

- Transferring logs to OBS

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateTransferSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateTransferRequest request = new CreateTransferRequest();
        CreateTransferRequestBody body = new CreateTransferRequestBody();
        TransferDetail logTransferDetailLogTransferInfo = new TransferDetail();
        logTransferDetailLogTransferInfo.withObsPeriod(TransferDetail.ObsPeriodEnum.NUMBER_2)
            .withObsEncryptedId("1bd90032-1424-481f-8558-ba49854xxxxx")
            .withObsPrefixName("xxxxx")
            .withObsPeriodUnit("min")
            .withObsBucketName("xxxxx")
            .withObsDirPreFixName("/xx")
            .withObsTimeZone("UTC+01:00")
            .withObsTimeZoneld("Africa/Lagos");
        CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer logAgencyTransferLogTransferInfo
        = new CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer();
        logAgencyTransferLogTransferInfo.withAgencyDomainId("1d26cc8c86a840e28a4f8d0d078xxxxx")
            .withAgencyDomainName("paas_apm_z004xxxxx_xx")
            .withAgencyName("test20210325")
            .withAgencyProjectId("2a473356cca5487f8373be891bfxxxxx")
            .withBeAgencyDomainId("1d26cc8c86a840e28a4f8d0d078xxxxx")
            .withBeAgencyProjectId("2a473356cca5487f8373be891bfxxxxx");
        CreateTransferRequestBodyLogTransferInfo logTransferInfobody = new
        CreateTransferRequestBodyLogTransferInfo();
        logTransferInfobody.withLogTransferType("OBS")
            .withLogTransferMode(CreateTransferRequestBodyLogTransferInfo.LogTransferModeEnum.from
            Value("xxxxx"))
            .withLogStorageFormat(CreateTransferRequestBodyLogTransferInfo.LogStorageFormatEnum.fr
            omValue("XXX"))
            .withLogTransferStatus(CreateTransferRequestBodyLogTransferInfo.LogTransferStatusEnum.fr
            omValue("XXXXX"))
            .withLogAgencyTransfer(logAgencyTransferLogTransferInfo)
            .withLogTransferDetail(logTransferDetailLogTransferInfo);
```

```
List<CreateTransferRequestBodyLogStreams> listbodyLogStreams = new ArrayList<>();
listbodyLogStreams.add(
    new CreateTransferRequestBodyLogStreams()
        .withLogStreamId("c776e1a7-8548-430a-afe5-xxxxxxxxxxxx")
);
body.withLogTransferInfo(logTransferInfobody);
body.withLogStreams(listbodyLogStreams);
body.withLogGroupId("8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxx");
request.withBody(body);
try {
    CreateTransferResponse response = client.createTransfer(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- **Creating a DIS transfer task**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateTransferSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateTransferRequest request = new CreateTransferRequest();
        CreateTransferRequestBody body = new CreateTransferRequestBody();
        TransferDetail logTransferDetailLogTransferInfo = new TransferDetail();
        logTransferDetailLogTransferInfo.withDisId("i1y8vfMTvf4LQzxxxx")
            .withDisName("xxxx");
        CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer logAgencyTransferLogTransferInfo
        = new CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer();
```

```
logAgencyTransferLogTransferInfo.withAgencyDomainId("1d26cc8c86a840e28a4f8d0d078xxxxx")
    .withAgencyDomainName("paas_apm_z004xxxxx_xx")
    .withAgencyName("test20210325")
    .withAgencyProjectId("2a473356cca5487f8373be891bfxxxxx")
    .withBeAgencyDomainId("1d26cc8c86a840e28a4f8d0d078xxxxx")
    .withBeAgencyProjectId("2a473356cca5487f8373be891bfxxxxx");
CreateTransferRequestBodyLogTransferInfo logTransferInfo = new
CreateTransferRequestBodyLogTransferInfo();
logTransferInfo.withLogTransferType("DIS")
    .withLogTransferMode(CreateTransferRequestBodyLogTransferInfo.LogTransferModeEnum.from
Value("xxxxx"))
    .withLogStorageFormat(CreateTransferRequestBodyLogTransferInfo.LogStorageFormatEnum.fr
omValue("XXX"))
    .withLogTransferStatus(CreateTransferRequestBodyLogTransferInfo.LogTransferStatusEnum.fr
omValue("XXXXX"))
    .withLogAgencyTransfer(logAgencyTransferLogTransferInfo)
    .withLogTransferDetail(logTransferDetailLogTransferInfo);
List<CreateTransferRequestBodyLogStreams> listbodyLogStreams = new ArrayList<>();
listbodyLogStreams.add(
    new CreateTransferRequestBodyLogStreams()
        .withLogStreamId("c776e1a7-8548-430a-afe5-xxxxxxxxxxxxx")
    );
body.withLogTransferInfo(logTransferInfo);
body.withLogStreams(listbodyLogStreams);
body.withLogGroupId("8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxxx");
request.withBody(body);
try {
    CreateTransferResponse response = client.createTransfer(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

- Transferring logs to OBS

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
```

```
.with_region(LtsRegion.value_of("<YOUR REGION>")) \
.build()

try:
    request = CreateTransferRequest()
    logTransferDetailLogTransferInfo = TransferDetail(
        obs_period=2,
        obs_encrypted_id="1bd90032-1424-481f-8558-ba49854xxxxx",
        obs_prefix_name="xxxxx",
        obs_period_unit="min",
        obs_bucket_name="xxxxx",
        obs_dir_pre_fix_name="/xx",
        obs_time_zone="UTC+01:00",
        obs_time_zone_id="Africa/Lagos"
    )
    logAgencyTransferLogTransferInfo =
CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer(
    agency_domain_id="1d26cc8c86a840e28a4f8d0d078xxxxx",
    agency_domain_name="paas_apm_z004xxxx_xx",
    agency_name="test20210325",
    agency_project_id="2a473356cca5487f8373be891bfxxxxx",
    be_agency_domain_id="1d26cc8c86a840e28a4f8d0d078xxxxx",
    be_agency_project_id="2a473356cca5487f8373be891bfxxxxx"
)
    logTransferInfobody = CreateTransferRequestBodyLogTransferInfo(
        log_transfer_type="OBS",
        log_transfer_mode="xxxxx",
        log_storage_format="XXX",
        log_transfer_status="XXXXX",
        log_agency_transfer=logAgencyTransferLogTransferInfo,
        log_transfer_detail=logTransferDetailLogTransferInfo
    )
    listLogStreamsbody = [
        CreateTransferRequestBodyLogStreams(
            log_stream_id="c776e1a7-8548-430a-afe5-xxxxxxxxxxxxx"
        )
    ]
    request.body = CreateTransferRequestBody(
        log_transfer_info=logTransferInfobody,
        log_streams=listLogStreamsbody,
        log_group_id="8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxxx"
    )
    response = client.create_transfer(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- **Creating a DIS transfer task**

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"
```

```
credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = CreateTransferRequest()
    logTransferDetailLogTransferInfo = TransferDetail(
        dis_id="i1y8vfMTvf4LQzxxxx",
        dis_name="xxxx"
    )
    logAgencyTransferLogTransferInfo =
CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer(
    agency_domain_id="1d26cc8c86a840e28a4f8d0d078xxxx",
    agency_domain_name="paas_apm_z004xxxx_xx",
    agency_name="test20210325",
    agency_project_id="2a473356cca5487f8373be891bfxxxx",
    be_agency_domain_id="1d26cc8c86a840e28a4f8d0d078xxxx",
    be_agency_project_id="2a473356cca5487f8373be891bfxxxx"
    )
    logTransferInfobody = CreateTransferRequestBodyLogTransferInfo(
        log_transfer_type="DIS",
        log_transfer_mode="xxxx",
        log_storage_format="XXX",
        log_transfer_status="XXXX",
        log_agency_transfer=logAgencyTransferLogTransferInfo,
        log_transfer_detail=logTransferDetailLogTransferInfo
    )
    listLogStreamsbody = [
        CreateTransferRequestBodyLogStreams(
            log_stream_id="c776e1a7-8548-430a-afe5-xxxxxxxxxxxx"
        )
    ]
    request.body = CreateTransferRequestBody(
        log_transfer_info=logTransferInfobody,
        log_streams=listLogStreamsbody,
        log_group_id="8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxx"
    )
    response = client.create_transfer(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

- Transferring logs to OBS

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
```



```
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateTransferRequest{}
obsEncryptedIdLogTransferDetail:= "1bd90032-1424-481f-8558-ba49854xxxxx"
obsPrefixNameLogTransferDetail:= "xxxxx"
obsDirPreFixNameLogTransferDetail:= "/xx"
obsTimeZoneLogTransferDetail:= "UTC+01:00"
obsTimeZoneldLogTransferDetail:= "Africa/Lagos"
logTransferDetailLogTransferInfo := &model.TransferDetail{
    ObsPeriod: model.GetTransferDetailObsPeriodEnum().E_2,
    ObsEncryptedId: &obsEncryptedIdLogTransferDetail,
    ObsPrefixName: &obsPrefixNameLogTransferDetail,
    ObsPeriodUnit: "min",
    ObsBucketName: "xxxxx",
    ObsDirPreFixName: &obsDirPreFixNameLogTransferDetail,
    ObsTimeZone: &obsTimeZoneLogTransferDetail,
    ObsTimeZoneld: &obsTimeZoneldLogTransferDetail,
}
logAgencyTransferLogTransferInfo :=
&model.CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer{
    AgencyDomainId: "1d26cc8c86a840e28a4f8d0d078xxxxx",
    AgencyDomainName: "paas_apm_z004xxxxx_xx",
    AgencyName: "test20210325",
    AgencyProjectId: "2a473356cca5487f8373be891bfxxxxx",
    BeAgencyDomainId: "1d26cc8c86a840e28a4f8d0d078xxxxx",
    BeAgencyProjectId: "2a473356cca5487f8373be891bfxxxxx",
}
logTransferInfobody := &model.CreateTransferRequestBodyLogTransferInfo{
    LogTransferType: "OBS",
    LogTransferMode:
model.GetCreateTransferRequestBodyLogTransferInfoLogTransferModeEnum().XXXXX,
    LogStorageFormat:
model.GetCreateTransferRequestBodyLogTransferInfoLogStorageFormatEnum().XXX,
    LogTransferStatus:
model.GetCreateTransferRequestBodyLogTransferInfoLogTransferStatusEnum().XXXXX,
    LogAgencyTransfer: logAgencyTransferLogTransferInfo,
    LogTransferDetail: logTransferDetailLogTransferInfo,
}
var listLogStreamsbody = []model.CreateTransferRequestBodyLogStreams{
    {
        LogStreamId: "c776e1a7-8548-430a-afe5-xxxxxxxxxxxxx",
    },
}
request.Body = &model.CreateTransferRequestBody{
    LogTransferInfo: logTransferInfobody,
    LogStreams: listLogStreamsbody,
    LogGroupld: "8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxxx",
}
response, err := client.CreateTransfer(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- Creating a DIS transfer task

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateTransferRequest{
        disIdLogTransferDetail:= "i1y8vfMTvf4LQzxxxxx"
        disNameLogTransferDetail:= "xxxxx"
        logTransferDetailLogTransferInfo := &model.TransferDetail{
            DisId: &disIdLogTransferDetail,
            DisName: &disNameLogTransferDetail,
        }
        logAgencyTransferLogTransferInfo :=
        &model.CreateTransferRequestBodyLogTransferInfoLogAgencyTransfer{
            AgencyDomainId: "1d26cc8c86a840e28a4f8d0d078xxxxx",
            AgencyDomainName: "paas_apm_z004xxxx_xx",
            AgencyName: "test20210325",
            AgencyProjectId: "2a473356cca5487f8373be891bfxxxxx",
            BeAgencyDomainId: "1d26cc8c86a840e28a4f8d0d078xxxxx",
            BeAgencyProjectId: "2a473356cca5487f8373be891bfxxxxx",
        }
        logTransferInfobody := &model.CreateTransferRequestBodyLogTransferInfo{
            LogTransferType: "DIS",
            LogTransferMode:
            model.GetCreateTransferRequestBodyLogTransferInfoLogTransferModeEnum().XXXXX,
            LogStorageFormat:
            model.GetCreateTransferRequestBodyLogTransferInfoLogStorageFormatEnum().XXX,
            LogTransferStatus:
            model.GetCreateTransferRequestBodyLogTransferInfoLogTransferStatusEnum().XXXXX,
            LogAgencyTransfer: logAgencyTransferLogTransferInfo,
            LogTransferDetail: logTransferDetailLogTransferInfo,
        }
        var listLogStreamsbody = []model.CreateTransferRequestBodyLogStreams{
            {
                LogStreamId: "c776e1a7-8548-430a-afe5-xxxxxxxxxxxx",
            },
        }
        request.Body = &model.CreateTransferRequestBody{
            LogTransferInfo: logTransferInfobody,
            LogStreams: listLogStreamsbody,
            LogGroupId: "8ba9e43f-be60-4d8c-9015-xxxxxxxxxxxx",
        }
    }
}
```

```
}
response, err := client.CreateTransfer(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The log transfer task is created.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	InternalServerError. The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.6.3 Deleting a Log Transfer Task

### Function

This API is used to delete an OBS, DIS, or DMS transfer task.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/{project\_id}/transfers

**Table 6-324** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-325** Query Parameters

Parameter	Mandatory	Type	Description
log_transfer_id	Yes	String	Log transfer task ID. You can obtain the ID by using one of the following methods: 1. Calling the API for querying a log transfer task. 2. Calling the API for creating a log transfer task. Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-326** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-327** Response body parameters

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_streams	Array of <a href="#">log_streams</a> objects	Log stream list.
log_transfer_id	String	Log transfer task ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_transfer_info	<a href="#">log_transfer_info_RespBody</a> object	Log transfer information.

**Table 6-328** log\_streams

Parameter	Type	Description
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-329** log\_transfer\_info\_RespBody

Parameter	Type	Description
log_agency_transf er	<a href="#">log_agency_transf er</a> object	Information about delegated log transfer. This parameter is returned for a delegated log transfer task.

Parameter	Type	Description
log_create_time	Integer	Time when the log transfer task was created. Minimum: <b>0</b> Maximum: <b>2147483647</b>
log_storage_format	String	Log transfer format. The value can be <b>RAW</b> or <b>JSON</b> . <b>RAW</b> indicates the raw log format, and <b>JSON</b> indicates the JSON format. <b>JSON</b> and <b>RAW</b> are supported for OBS and DIS transfer tasks, but only <b>RAW</b> is supported for DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>JSON</b></li> <li>• <b>RAW</b></li> </ul>
log_transfer_detail	<b>TransferDetail</b> object	Log transfer details.
log_transfer_mode	String	Log transfer mode. <b>cycle</b> indicates periodical transfer, and <b>realTime</b> indicates real-time transfer. <b>cycle</b> is available to OBS transfer tasks and <b>realTime</b> is available to DIS and DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>cycle</b></li> <li>• <b>realTime</b></li> </ul>
log_transfer_status	String	Log transfer status. <b>ENABLE</b> indicates that log transfer is enabled, <b>DISABLE</b> indicates that log transfer is disabled, and <b>EXCEPTION</b> indicates that log transfer is abnormal. Enumeration values: <ul style="list-style-type: none"> <li>• <b>ENABLE</b></li> <li>• <b>DISABLE</b></li> <li>• <b>EXCEPTION</b></li> </ul>
log_transfer_type	String	Log transfer type. You can transfer logs to OBS, DIS, and DMS. Enumeration values: <ul style="list-style-type: none"> <li>• <b>OBS</b></li> <li>• <b>DIS</b></li> <li>• <b>DMS</b></li> </ul>

**Table 6-330** log\_agency\_transfer

Parameter	Type	Description
agency_domain_id	String	Delegator account ID. Minimum: <b>1</b> Maximum: <b>128</b>
agency_domain_name	String	Delegator account name. Minimum: <b>1</b> Maximum: <b>128</b>
agency_name	String	Name of the agency created by the delegator. Minimum: <b>1</b> Maximum: <b>128</b>
agency_project_id	String	Project ID of the delegator. Minimum: <b>32</b> Maximum: <b>32</b>
be_agency_domain_id	String	Account ID of the delegated party (ID of the account that created the log transfer task). Minimum: <b>1</b> Maximum: <b>128</b>
be_agency_project_id	String	Project ID of the delegated party (project ID of the account that created the log transfer task). Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-331** TransferDetail

Parameter	Type	Description
obs_period	Integer	<p>Length of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 30</li> </ul>
obs_period_unit	String	<p>Unit of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• "min"</li> <li>• "hour"</li> </ul>
obs_bucket_name	String	<p>OBS log bucket name. This parameter is required when you create an OBS transfer task.</p> <p>Minimum length: 3 characters. Maximum length: 63 characters.</p> <p>Minimum: <b>3</b> Maximum: <b>63</b></p>



Parameter	Type	Description
obs_encrypted_id	String	KMS key ID for an OBS transfer task. Required if encryption is enabled for the target OBS bucket. Minimum length: 36 characters. Maximum length: 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>
obs_dir_pre_fix_name	String	Custom transfer path of an OBS transfer task. This parameter is optional. The value must match the regular expression: $\wedge(\wedge)?([a-zA-Z0-9.-]+\wedge)/([a-zA-Z0-9.-]+\wedge)*(\wedge)?\wedge$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_prefix_name	String	Transfer file prefix of an OBS transfer task. This parameter is optional. The value must match the regular expression: $\wedge[a-zA-Z0-9._-]*\wedge$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_time_zone	String	Time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone_id</b> must also be specified.
obs_time_zone_id	String	ID of the time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone</b> must also be specified.

Parameter	Type	Description
dis_id	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
dis_name	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
kafka_id	String	Kafka ID of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>36</b> Maximum: <b>36</b>
kafka_topic	String	Kafka topic of a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>1</b> Maximum: <b>128</b>
obs_transfer_path	String	OBS bucket path, which is the log transfer destination. Minimum: <b>0</b> Maximum: <b>256</b>
obs_eps_id	String	Enterprise project ID of an OBS transfer task. Minimum: <b>0</b> Maximum: <b>128</b>

Parameter	Type	Description
obs_encrypted_enabled	Boolean	Whether OBS bucket encryption is enabled. Enumeration values: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>
tags	Array of strings	If tag delivery is enabled, this field must contain the following host information: <b>hostIP</b> , <b>hostId</b> , <b>hostName</b> , <b>pathFile</b> , and <b>collectTime</b> . The common fields include <b>logStreamName</b> , <b>regionName</b> , <b>logGroupName</b> and <b>projectId</b> , which are optional. The transfer tag <b>streamTag</b> is optional.

**Status code: 400**

**Table 6-332** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-333** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

Deleting a log transfer task based on the task ID

```
DELETE https://{endpoint}/v2/{project_id}/transfers
/v2/{project_id}/transfers?log_transfer_id=cfc43c45-9edc-4a03-8578-0eb00cxxxxxx
```

## Example Responses

### Status code: 200

The log transfer task is deleted.

```
{
  "log_group_id" : "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
  "log_group_name" : "lts-group-kafka",
  "log_streams" : [ {
    "log_stream_id" : "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
    "log_stream_name" : "lts-topic-kafka"
  } ],
  "log_transfer_id" : "ddced522-233a-4181-a5fc-7b458c819afc",
  "log_transfer_info" : {
    "log_create_time" : 1634802241847,
    "log_storage_format" : "JSON",
    "log_agency_transfer" : {
      "agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "agency_domain_name" : "paas_apm_z004xxxxx_xx",
      "agency_name" : "test20210325",
      "agency_project_id" : "2a473356cca5487f8373be891bfxxxxx",
      "be_agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "be_agency_project_id" : "2a473356cca5487f8373be891bfxxxxx"
    },
    "log_transfer_detail" : {
      "obs_period" : 2,
      "obs_prefix_name" : "",
      "obs_period_unit" : "min",
      "obs_transfer_path" : "/0002/LogTanks/xxx/",
      "obs_bucket_name" : "0002",
      "obs_encrypted_enable" : false,
      "obs_dir_pre_fix_name" : "",
      "obs_time_zone" : "UTC+01:00",
      "obs_time_zone_id" : "Africa/Lagos",
      "dis_id" : "xxxxx",
      "dis_name" : "xxxxx",
      "kafka_id" : "xxxxxx",
      "kafka_topic" : "xxxxx"
    },
    "log_transfer_mode" : "cycle",
    "log_transfer_status" : "ENABLE",
    "log_transfer_type" : "OBS"
  }
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0405",
  "error_msg" : "The log transfer does not existed"
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

## Status Codes

Status Code	Description
200	The log transfer task is deleted.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.6.4 Updating a Log Transfer Task

### Function

This API is used to update an OBS, DIS, or DMS transfer task.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/{project\_id}/transfers

**Table 6-334** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-335** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-336** Request body parameters

Parameter	Mandatory	Type	Description
log_transfer_id	Yes	String	Log transfer task ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_transfer_info	Yes	<a href="#">update_log_transfer_info</a> object	Log transfer information.

**Table 6-337** update\_log\_transfer\_info

Parameter	Mandatory	Type	Description
log_storage_format	Yes	String	Log transfer format. The value can be <b>RAW</b> or <b>JSON</b> . <b>RAW</b> indicates the raw log format, and <b>JSON</b> indicates the JSON format. Enumeration values: <ul style="list-style-type: none"> <li>• <b>JSON</b></li> <li>• <b>RAW</b></li> </ul>

Parameter	Mandatory	Type	Description
log_transfer_status	Yes	String	Log transfer status. <b>ENABLE</b> indicates that log transfer is enabled, <b>DISABLE</b> indicates that log transfer is disabled, and <b>EXCEPTION</b> indicates that log transfer is abnormal. Enumeration values: <ul style="list-style-type: none"> <li>• <b>ENABLE</b></li> <li>• <b>DISABLE</b></li> <li>• <b>EXCEPTION</b></li> </ul>
log_transfer_detail	Yes	<a href="#">log_transfer_detail</a> object	Log transfer details.

**Table 6-338** log\_transfer\_detail

Parameter	Mandatory	Type	Description
obs_period	Yes	Integer	Length of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b> , and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours. Enumeration values: <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 30</li> </ul>

Parameter	Mandatory	Type	Description
obs_period_unit	Yes	String	Unit of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b> , and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours. Enumeration values: <ul style="list-style-type: none"> <li>• <b>min</b></li> <li>• <b>hour</b></li> </ul>
obs_bucket_name	Yes	String	OBS bucket name. This parameter is required when you create an OBS transfer task. Minimum: <b>3</b> Maximum: <b>63</b>
obs_encrypted_id	No	String	KMS key ID for an OBS transfer task. Required if encryption is enabled for the target OBS bucket. Minimum: <b>36</b> Maximum: <b>36</b>
obs_dir_prefix_name	No	String	Custom transfer path of an OBS transfer task. This parameter is optional. Minimum: <b>1</b> Maximum: <b>64</b>
obs_prefix_name	No	String	Transfer file prefix of an OBS transfer task. This parameter is optional. Minimum: <b>1</b> Maximum: <b>64</b>
obs_time_zone	No	String	Time zone for an OBS transfer task. For details, see Time Zone List for OBS Transfer. If this parameter is specified, <b>obs_time_zone_id</b> must also be specified.



Parameter	Mandatory	Type	Description
obs_time_zone_id	No	String	ID of the time zone for an OBS transfer task. For details, see Time Zone List for OBS Transfer. If this parameter is specified, <b>obs_time_zone</b> must also be specified.
dis_id	No	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum: <b>1</b> Maximum: <b>128</b>
dis_name	No	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum: <b>1</b> Maximum: <b>64</b>
kafka_id	No	String	Kafka ID of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance.
kafka_topic	No	String	Kafka topic of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance.
obs_eps_id	No	String	Enterprise project ID of an OBS transfer task.
obs_encrypted_enable	No	Boolean	Whether OBS bucket encryption is enabled.

Parameter	Mandatory	Type	Description
tags	No	Array of strings	If tag delivery is enabled, this field must contain the following host information: <b>hostIP</b> , <b>hostId</b> , <b>hostName</b> , <b>pathFile</b> , and <b>collectTime</b> . The common fields are <b>logStreamName</b> , <b>regionName</b> , <b>logGroupName</b> , and <b>projectId</b> , which are optional. The tag for enabling transfer is <b>streamTag</b> , which is optional.
lts_tags	No	Array of strings	Whether to transfer the tag field. This parameter is optional when the JSON format is selected for DMS transfer.
stream_tags	No	Array of strings	Whether to transfer the log stream tag field. This parameter is optional when the JSON format is selected for DMS transfer.
struct_fields	No	Array of strings	Whether to transfer the structured fields. This parameter is optional when the JSON format is selected for DMS transfer.
invalid_field_value	No	String	Whether to enable the invalid field fill function. This parameter is optional when the JSON format is selected for DMS transfer.

## Response Parameters

Status code: 200

Table 6-339 Response body parameters

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_streams	Array of <a href="#">log_streams</a> objects	Log stream list.
log_transfer_id	String	Log transfer task ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_transfer_info	<a href="#">log_transfer_info_RespBody</a> object	Log transfer information.

**Table 6-340** log\_streams

Parameter	Type	Description
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-341** log\_transfer\_info\_RespBody

Parameter	Type	Description
log_agency_transf er	<a href="#">log_agency_transf er</a> object	Information about delegated log transfer. This parameter is returned for a delegated log transfer task.
log_create_time	Integer	Time when the log transfer task was created. Minimum: <b>0</b> Maximum: <b>2147483647</b>

Parameter	Type	Description
log_storage_format	String	Log transfer format. The value can be <b>RAW</b> or <b>JSON</b> . <b>RAW</b> indicates the raw log format, and <b>JSON</b> indicates the JSON format. <b>JSON</b> and <b>RAW</b> are supported for OBS and DIS transfer tasks, but only <b>RAW</b> is supported for DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>JSON</b></li> <li>• <b>RAW</b></li> </ul>
log_transfer_detail	<b>TransferDetail</b> object	Log transfer details.
log_transfer_mode	String	Log transfer mode. <b>cycle</b> indicates periodical transfer, and <b>realTime</b> indicates real-time transfer. <b>cycle</b> is available to OBS transfer tasks and <b>realTime</b> is available to DIS and DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>cycle</b></li> <li>• <b>realTime</b></li> </ul>
log_transfer_status	String	Log transfer status. <b>ENABLE</b> indicates that log transfer is enabled, <b>DISABLE</b> indicates that log transfer is disabled, and <b>EXCEPTION</b> indicates that log transfer is abnormal. Enumeration values: <ul style="list-style-type: none"> <li>• <b>ENABLE</b></li> <li>• <b>DISABLE</b></li> <li>• <b>EXCEPTION</b></li> </ul>
log_transfer_type	String	Log transfer type. You can transfer logs to OBS, DIS, and DMS. Enumeration values: <ul style="list-style-type: none"> <li>• <b>OBS</b></li> <li>• <b>DIS</b></li> <li>• <b>DMS</b></li> </ul>

**Table 6-342** log\_agency\_transfer

Parameter	Type	Description
agency_domain_id	String	Delegator account ID. Minimum: <b>1</b> Maximum: <b>128</b>
agency_domain_name	String	Delegator account name. Minimum: <b>1</b> Maximum: <b>128</b>
agency_name	String	Name of the agency created by the delegator. Minimum: <b>1</b> Maximum: <b>128</b>
agency_project_id	String	Project ID of the delegator. Minimum: <b>32</b> Maximum: <b>32</b>
be_agency_domain_id	String	Account ID of the delegated party (ID of the account that created the log transfer task). Minimum: <b>1</b> Maximum: <b>128</b>
be_agency_project_id	String	Project ID of the delegated party (project ID of the account that created the log transfer task). Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-343** TransferDetail

Parameter	Type	Description
obs_period	Integer	<p>Length of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 30</li> </ul>
obs_period_unit	String	<p>Unit of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• "min"</li> <li>• "hour"</li> </ul>
obs_bucket_name	String	<p>OBS log bucket name. This parameter is required when you create an OBS transfer task.</p> <p>Minimum length: 3 characters. Maximum length: 63 characters.</p> <p>Minimum: <b>3</b> Maximum: <b>63</b></p>

Parameter	Type	Description
obs_encrypted_id	String	KMS key ID for an OBS transfer task. Required if encryption is enabled for the target OBS bucket. Minimum length: 36 characters. Maximum length: 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>
obs_dir_pre_fix_name	String	Custom transfer path of an OBS transfer task. This parameter is optional. The value must match the regular expression: $\wedge(\wedge)?([a-zA-Z0-9.-]+\wedge)/([a-zA-Z0-9.-]+\wedge)*(\wedge)?\wedge$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_prefix_name	String	Transfer file prefix of an OBS transfer task. This parameter is optional. The value must match the regular expression: $\wedge[a-zA-Z0-9._-]*\wedge$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_time_zone	String	Time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone_id</b> must also be specified.
obs_time_zone_id	String	ID of the time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone</b> must also be specified.

Parameter	Type	Description
dis_id	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
dis_name	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
kafka_id	String	Kafka ID of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>36</b> Maximum: <b>36</b>
kafka_topic	String	Kafka topic of a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>1</b> Maximum: <b>128</b>
obs_transfer_path	String	OBS bucket path, which is the log transfer destination. Minimum: <b>0</b> Maximum: <b>256</b>
obs_eps_id	String	Enterprise project ID of an OBS transfer task. Minimum: <b>0</b> Maximum: <b>128</b>



Parameter	Type	Description
obs_encrypted_able	Boolean	Whether OBS bucket encryption is enabled. Enumeration values: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>
tags	Array of strings	If tag delivery is enabled, this field must contain the following host information: <b>hostIP</b> , <b>hostId</b> , <b>hostName</b> , <b>pathFile</b> , and <b>collectTime</b> . The common fields include <b>logStreamName</b> , <b>regionName</b> , <b>logGroupName</b> and <b>projectId</b> , which are optional. The transfer tag <b>streamTag</b> is optional.

**Status code: 400**

**Table 6-344** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-345** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

- Updating an OBS transfer task

PUT [https://{endpoint}/v2/{project\\_id}/transfers](https://{endpoint}/v2/{project_id}/transfers)

```
{
  "log_transfer_id": "9f74e101-b969-483c-a610-d3f3064xxxxx",
  "log_transfer_info": {
    "log_storage_format": "JSON",
    "log_transfer_status": "DISABLE",
    "log_transfer_detail": {
      "obs_period": 3,
      "obs_period_unit": "hour",
      "obs_bucket_name": "0xxx",
      "obs_encrypted_id": "1bd90032-1424-481f-8558-ba49854xxxxx",
      "obs_dir_pre_fix_name": "/xx",
      "obs_prefix_name": "xxxxx",
      "obs_time_zone": "UTC+01:00",
      "obs_time_zone_id": "Africa/Lagos"
    }
  }
}
```

- Updating a DIS transfer task

PUT [https://{endpoint}/v2/{project\\_id}/transfers](https://{endpoint}/v2/{project_id}/transfers)

```
{
  "log_transfer_id": "9f74e101-b969-483c-a610-d3f3064xxxxx",
  "log_transfer_info": {
    "log_storage_format": "JSON",
    "log_transfer_status": "DISABLE",
    "log_transfer_detail": {
      "dis_id": "xxxxx",
      "dis_name": "xxxxxx"
    }
  }
}
```

- Updating a DMS transfer task

PUT [https://{endpoint}/v2/{project\\_id}/transfers](https://{endpoint}/v2/{project_id}/transfers)

```
{
  "log_transfer_id": "9f74e101-b969-483c-a610-d3f3064xxxxx",
  "log_transfer_info": {
    "log_storage_format": "JSON",
    "log_transfer_status": "DISABLE",
    "log_transfer_detail": {
      "kafka_id": "xxxxx",
      "kafka_topic": "xxxxxx"
    }
  }
}
```

## Example Responses

**Status code: 200**

The transfer task is updated.

- The following parameters are returned for an OBS transfer task:

```
{
  "log_group_id": "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
  "log_group_name": "lts-group-kafka",
  "log_streams": [ {
    "log_stream_id": "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
    "log_stream_name": "lts-topic-kafka"
  } ],
}
```

```

"log_transfer_id" : "ddced522-233a-4181-a5fc-7b458c819afc",
"log_transfer_info" : {
  "log_create_time" : 1634802241847,
  "log_storage_format" : "JSON",
  "log_agency_transfer" : {
    "agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
    "agency_domain_name" : "paas_apm_z004xxxxx_xx",
    "agency_name" : "test20210325",
    "agency_project_id" : "2a473356cca5487f8373be891bfxxxxx",
    "be_agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
    "be_agency_project_id" : "2a473356cca5487f8373be891bfxxxxx"
  },
  "log_transfer_detail" : {
    "obs_period" : 2,
    "obs_prefix_name" : "",
    "obs_period_unit" : "min",
    "obs_transfer_path" : "/0002/LogTanks/cn-north-7/",
    "obs_bucket_name" : "0002",
    "obs_encrypted_enable" : false,
    "obs_dir_pre_fix_name" : "",
    "obs_time_zone" : "UTC+01:00",
    "obs_time_zone_id" : "Africa/Lagos",
    "tags" : [ ]
  },
  "log_transfer_mode" : "cycle",
  "log_transfer_status" : "ENABLE",
  "log_transfer_type" : "OBS"
}

```

- The following parameters are returned for a DIS transfer task:

```

{
  "log_group_id" : "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
  "log_group_name" : "lts-group-kafka",
  "log_streams" : [ {
    "log_stream_id" : "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
    "log_stream_name" : "lts-topic-kafka"
  } ],
  "log_transfer_id" : "ddced522-233a-4181-a5fc-7b458c819afc",
  "log_transfer_info" : {
    "log_create_time" : 1634802241847,
    "log_storage_format" : "JSON",
    "log_agency_transfer" : {
      "agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "agency_domain_name" : "paas_apm_z004xxxxx_xx",
      "agency_name" : "test20210325",
      "agency_project_id" : "2a473356cca5487f8373be891bfxxxxx",
      "be_agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
      "be_agency_project_id" : "2a473356cca5487f8373be891bfxxxxx"
    },
    "log_transfer_detail" : {
      "dis_id" : "xxxxx",
      "dis_name" : "xxxxxx",
      "tags" : [ ]
    },
    "log_transfer_mode" : "cycle",
    "log_transfer_status" : "ENABLE",
    "log_transfer_type" : "OBS"
  }
}

```

- The following parameters are returned for a DMS transfer task:

```

{
  "log_group_id" : "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
  "log_group_name" : "lts-group-kafka",
  "log_streams" : [ {
    "log_stream_id" : "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
    "log_stream_name" : "lts-topic-kafka"
  } ],
  "log_transfer_id" : "ddced522-233a-4181-a5fc-7b458c819afc",

```

```
"log_transfer_info" : {
  "log_create_time" : 1634802241847,
  "log_storage_format" : "JSON",
  "log_agency_transfer" : {
    "agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
    "agency_domain_name" : "paas_apm_z004xxxxx_xx",
    "agency_name" : "test20210325",
    "agency_project_id" : "2a473356cca5487f8373be891bfxxxxx",
    "be_agency_domain_id" : "1d26cc8c86a840e28a4f8d0d078xxxxx",
    "be_agency_project_id" : "2a473356cca5487f8373be891bfxxxxx"
  },
  "log_transfer_detail" : {
    "kafka_id" : "xxxxxx",
    "kafka_topic" : "xxxxx",
    "tags" : [ ]
  },
  "log_transfer_mode" : "cycle",
  "log_transfer_status" : "ENABLE",
  "log_transfer_type" : "OBS"
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.0009",
  "error_msg" : "The Field transfer id is invalid or missing."
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Updating an OBS transfer task

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class UpdateTransferSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
```

running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateTransferRequest request = new UpdateTransferRequest();
UpdateTransferRequestBody body = new UpdateTransferRequestBody();
TransferDetail logTransferDetailLogTransferInfo = new TransferDetail();
logTransferDetailLogTransferInfo.withObsPeriod(TransferDetail.ObsPeriodEnum.NUMBER_3)
    .withObsEncryptedId("1bd90032-1424-481f-8558-ba49854xxxxx")
    .withObsPrefixName("xxxxx")
    .withObsPeriodUnit("hour")
    .withObsBucketName("0xxx")
    .withObsDirPreFixName("/xx")
    .withObsTimeZone("UTC+01:00")
    .withObsTimeZoneld("Africa/Lagos");
UpdateTransferRequestBodyLogTransferInfo logTransferInfobody = new
UpdateTransferRequestBodyLogTransferInfo();

logTransferInfobody.withLogStorageFormat(UpdateTransferRequestBodyLogTransferInfo.LogStorageFor
matEnum.fromValue("JSON"))
    .withLogTransferStatus(UpdateTransferRequestBodyLogTransferInfo.LogTransferStatusEnum.fro
mValue("DISABLE"))
    .withLogTransferDetail(logTransferDetailLogTransferInfo);
body.withLogTransferInfo(logTransferInfobody);
body.withLogTransferId("9f74e101-b969-483c-a610-d3f3064xxxxx");
request.withBody(body);
try {
    UpdateTransferResponse response = client.updateTransfer(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- **Updating a DIS transfer task**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class UpdateTransferSolution {

    public static void main(String[] args) {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateTransferRequest request = new UpdateTransferRequest();
UpdateTransferRequestBody body = new UpdateTransferRequestBody();
TransferDetail logTransferDetailLogTransferInfo = new TransferDetail();
logTransferDetailLogTransferInfo.withDisId("xxxxx")
    .withDisName("xxxxx");
UpdateTransferRequestBodyLogTransferInfo logTransferInfobody = new
UpdateTransferRequestBodyLogTransferInfo();

logTransferInfobody.withLogStorageFormat(UpdateTransferRequestBodyLogTransferInfo.LogStorageFor
matEnum.fromValue("JSON"))
    .withLogTransferStatus(UpdateTransferRequestBodyLogTransferInfo.LogTransferStatusEnum.fro
mValue("DISABLE"))
    .withLogTransferDetail(logTransferDetailLogTransferInfo);
body.withLogTransferInfo(logTransferInfobody);
body.withLogTransferId("9f74e101-b969-483c-a610-d3f3064xxxxx");
request.withBody(body);
try {
    UpdateTransferResponse response = client.updateTransfer(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- **Updating a DMS transfer task**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class UpdateTransferSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
```

```
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateTransferRequest request = new UpdateTransferRequest();
UpdateTransferRequestBody body = new UpdateTransferRequestBody();
TransferDetail logTransferDetailLogTransferInfo = new TransferDetail();
logTransferDetailLogTransferInfo.withKafkaId("xxxxx")
    .withKafkaTopic("xxxxx");
UpdateTransferRequestBodyLogTransferInfo logTransferInfobody = new
UpdateTransferRequestBodyLogTransferInfo();

logTransferInfobody.withLogStorageFormat(UpdateTransferRequestBodyLogTransferInfo.LogStorageFor
matEnum.fromValue("JSON"))
    .withLogTransferStatus(UpdateTransferRequestBodyLogTransferInfo.LogTransferStatusEnum.fro
mValue("DISABLE"))
    .withLogTransferDetail(logTransferDetailLogTransferInfo);
body.withLogTransferInfo(logTransferInfobody);
body.withLogTransferId("9f74e101-b969-483c-a610-d3f3064xxxxx");
request.withBody(body);
try {
    UpdateTransferResponse response = client.updateTransfer(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

- Updating an OBS transfer task

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    environment
    ak = os.environ["CLOUD_SDK_AK"]
```

```
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = UpdateTransferRequest()
    logTransferDetailLogTransferInfo = TransferDetail(
        obs_period=3,
        obs_encrypted_id="1bd90032-1424-481f-8558-ba49854xxxxx",
        obs_prefix_name="xxxxx",
        obs_period_unit="hour",
        obs_bucket_name="0xxx",
        obs_dir_pre_fix_name="/xx",
        obs_time_zone="UTC+01:00",
        obs_time_zone_id="Africa/Lagos"
    )
    logTransferInfobody = UpdateTransferRequestBodyLogTransferInfo(
        log_storage_format="JSON",
        log_transfer_status="DISABLE",
        log_transfer_detail=logTransferDetailLogTransferInfo
    )
    request.body = UpdateTransferRequestBody(
        log_transfer_info=logTransferInfobody,
        log_transfer_id="9f74e101-b969-483c-a610-d3f3064xxxxx"
    )
    response = client.update_transfer(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- Updating a DIS transfer task

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateTransferRequest()
        logTransferDetailLogTransferInfo = TransferDetail(
            dis_id="xxxxx",
```



```
        dis_name="xxxxxx"
    )
    logTransferInfobody = UpdateTransferRequestBodyLogTransferInfo(
        log_storage_format="JSON",
        log_transfer_status="DISABLE",
        log_transfer_detail=logTransferDetailLogTransferInfo
    )
    request.body = UpdateTransferRequestBody(
        log_transfer_info=logTransferInfobody,
        log_transfer_id="9f74e101-b969-483c-a610-d3f3064xxxxx"
    )
    response = client.update_transfer(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- Updating a DMS transfer task

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateTransferRequest()
        logTransferDetailLogTransferInfo = TransferDetail(
            kafka_id="xxxxx",
            kafka_topic="xxxxxx"
        )
        logTransferInfobody = UpdateTransferRequestBodyLogTransferInfo(
            log_storage_format="JSON",
            log_transfer_status="DISABLE",
            log_transfer_detail=logTransferDetailLogTransferInfo
        )
        request.body = UpdateTransferRequestBody(
            log_transfer_info=logTransferInfobody,
            log_transfer_id="9f74e101-b969-483c-a610-d3f3064xxxxx"
        )
        response = client.update_transfer(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

- Updating an OBS transfer task

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateTransferRequest{
        obsEncryptedIdLogTransferDetail:= "1bd90032-1424-481f-8558-ba49854xxxxx"
        obsPrefixNameLogTransferDetail:= "xxxxx"
        obsDirPreFixNameLogTransferDetail:= "/xx"
        obsTimeZoneLogTransferDetail:= "UTC+01:00"
        obsTimeZoneldLogTransferDetail:= "Africa/Lagos"
        logTransferDetailLogTransferInfo := &model.TransferDetail{
            ObsPeriod: model.GetTransferDetailObsPeriodEnum().E_3,
            ObsEncryptedId: &obsEncryptedIdLogTransferDetail,
            ObsPrefixName: &obsPrefixNameLogTransferDetail,
            ObsPeriodUnit: "hour",
            ObsBucketName: "0xxx",
            ObsDirPreFixName: &obsDirPreFixNameLogTransferDetail,
            ObsTimeZone: &obsTimeZoneLogTransferDetail,
            ObsTimeZoneld: &obsTimeZoneldLogTransferDetail,
        }
        logTransferInfobody := &model.UpdateTransferRequestBodyLogTransferInfo{
            LogStorageFormat:
model.GetUpdateTransferRequestBodyLogTransferInfoLogStorageFormatEnum().JSON,
            LogTransferStatus:
model.GetUpdateTransferRequestBodyLogTransferInfoLogTransferStatusEnum().DISABLE,
            LogTransferDetail: logTransferDetailLogTransferInfo,
        }
        request.Body = &model.UpdateTransferRequestBody{
            LogTransferInfo: logTransferInfobody,
            LogTransferId: "9f74e101-b969-483c-a610-d3f3064xxxxx",
        }
        response, err := client.UpdateTransfer(request)
        if err == nil {
            fmt.Printf("%+v\n", response)
        } else {
            fmt.Println(err)
        }
    }
}
```

- Updating a DIS transfer task

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateTransferRequest{}
    disIdLogTransferDetail := "xxxxx"
    disNameLogTransferDetail := "xxxxxx"
    logTransferDetailLogTransferInfo := &model.TransferDetail{
        DisId: &disIdLogTransferDetail,
        DisName: &disNameLogTransferDetail,
    }
    logTransferInfoBody := &model.UpdateTransferRequestBodyLogTransferInfo{
        LogStorageFormat:
    model.GetUpdateTransferRequestBodyLogTransferInfoLogStorageFormatEnum().JSON,
        LogTransferStatus:
    model.GetUpdateTransferRequestBodyLogTransferInfoLogTransferStatusEnum().DISABLE,
        LogTransferDetail: logTransferDetailLogTransferInfo,
    }
    request.Body = &model.UpdateTransferRequestBody{
        LogTransferInfo: logTransferInfoBody,
        LogTransferId: "9f74e101-b969-483c-a610-d3f3064xxxxx",
    }
    response, err := client.UpdateTransfer(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Updating a DMS transfer task

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
```

```

"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateTransferRequest{}
    kafkaIdLogTransferDetail:= "xxxxx"
    kafkaTopicLogTransferDetail:= "xxxxxx"
    logTransferDetailLogTransferInfo := &model.TransferDetail{
        KafkaId: &kafkaIdLogTransferDetail,
        KafkaTopic: &kafkaTopicLogTransferDetail,
    }
    logTransferInfobody := &model.UpdateTransferRequestBodyLogTransferInfo{
        LogStorageFormat:
    model.GetUpdateTransferRequestBodyLogTransferInfoLogStorageFormatEnum().JSON,
        LogTransferStatus:
    model.GetUpdateTransferRequestBodyLogTransferInfoLogTransferStatusEnum().DISABLE,
        LogTransferDetail: logTransferDetailLogTransferInfo,
    }
    request.Body = &model.UpdateTransferRequestBody{
        LogTransferInfo: logTransferInfobody,
        LogTransferId: "9f74e101-b969-483c-a610-d3f3064xxxxx",
    }
    response, err := client.UpdateTransfer(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The transfer task is updated.

Status Code	Description
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.6.5 Querying a Log Transfer Task

### Function

This API is used to query an OBS, DIS, or DMS transfer task.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/transfers

**Table 6-346** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-347** Query Parameters

Parameter	Mandatory	Type	Description
log_transfer_type	No	String	Log transfer type. You can transfer logs to OBS, DIS, and DMS. Enumeration values: <ul style="list-style-type: none"> <li>• <b>OBS</b></li> <li>• <b>DIS</b></li> <li>• <b>DMS</b></li> </ul>
log_group_name	No	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_stream_name	No	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

## Request Parameters

**Table 6-348** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: **200**

**Table 6-349** Response body parameters

Parameter	Type	Description
log_transfers	Array of <a href="#">CreateTransferResponseBody</a> objects	Log transfer task information.

**Table 6-350** CreateTransferResponseBody

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_streams	Array of <a href="#">log_streams</a> objects	Log stream list.
log_transfer_id	String	Log transfer task ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_transfer_info	<a href="#">log_transfer_info_RespBody</a> object	Log transfer information.

**Table 6-351** log\_streams

Parameter	Type	Description
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-352** log\_transfer\_info\_RespBody

Parameter	Type	Description
log_agency_transfer	<a href="#">log_agency_transfer</a> object	Information about delegated log transfer. This parameter is returned for a delegated log transfer task.
log_create_time	Integer	Time when the log transfer task was created. Minimum: <b>0</b> Maximum: <b>2147483647</b>
log_storage_format	String	Log transfer format. The value can be <b>RAW</b> or <b>JSON</b> . <b>RAW</b> indicates the raw log format, and <b>JSON</b> indicates the JSON format. <b>JSON</b> and <b>RAW</b> are supported for OBS and DIS transfer tasks, but only <b>RAW</b> is supported for DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>JSON</b></li> <li>• <b>RAW</b></li> </ul>
log_transfer_detail	<a href="#">TransferDetail</a> object	Log transfer details.
log_transfer_mode	String	Log transfer mode. <b>cycle</b> indicates periodical transfer, and <b>realTime</b> indicates real-time transfer. <b>cycle</b> is available to OBS transfer tasks and <b>realTime</b> is available to DIS and DMS transfer tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>cycle</b></li> <li>• <b>realTime</b></li> </ul>
log_transfer_status	String	Log transfer status. <b>ENABLE</b> indicates that log transfer is enabled, <b>DISABLE</b> indicates that log transfer is disabled, and <b>EXCEPTION</b> indicates that log transfer is abnormal. Enumeration values: <ul style="list-style-type: none"> <li>• <b>ENABLE</b></li> <li>• <b>DISABLE</b></li> <li>• <b>EXCEPTION</b></li> </ul>



Parameter	Type	Description
log_transfer_type	String	Log transfer type. You can transfer logs to OBS, DIS, and DMS. Enumeration values: <ul style="list-style-type: none"> <li>• <b>OBS</b></li> <li>• <b>DIS</b></li> <li>• <b>DMS</b></li> </ul>

**Table 6-353** log\_agency\_transfer

Parameter	Type	Description
agency_domain_id	String	Delegator account ID. Minimum: <b>1</b> Maximum: <b>128</b>
agency_domain_name	String	Delegator account name. Minimum: <b>1</b> Maximum: <b>128</b>
agency_name	String	Name of the agency created by the delegator. Minimum: <b>1</b> Maximum: <b>128</b>
agency_project_id	String	Project ID of the delegator. Minimum: <b>32</b> Maximum: <b>32</b>
be_agency_domain_id	String	Account ID of the delegated party (ID of the account that created the log transfer task). Minimum: <b>1</b> Maximum: <b>128</b>
be_agency_project_id	String	Project ID of the delegated party (project ID of the account that created the log transfer task). Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-354** TransferDetail

Parameter	Type	Description
obs_period	Integer	<p>Length of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 30</li> </ul>
obs_period_unit	String	<p>Unit of the transfer interval for an OBS transfer task. This parameter is required when you create an OBS transfer task. The log transfer interval is specified by the combination of the values of <b>obs_period</b> and <b>obs_period_unit</b>, and must be set to one of the following: 2 min, 5 min, 30 min, 1 hour, 3 hours, 6 hours, and 12 hours.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• "min"</li> <li>• "hour"</li> </ul>
obs_bucket_name	String	<p>OBS log bucket name. This parameter is required when you create an OBS transfer task.</p> <p>Minimum length: 3 characters. Maximum length: 63 characters.</p> <p>Minimum: <b>3</b> Maximum: <b>63</b></p>

Parameter	Type	Description
obs_encrypted_id	String	KMS key ID for an OBS transfer task. Required if encryption is enabled for the target OBS bucket. Minimum length: 36 characters. Maximum length: 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>
obs_dir_pre_fix_name	String	Custom transfer path of an OBS transfer task. This parameter is optional. The value must match the regular expression: $^(/)?([a-zA-Z0-9.-]+)(/[a-zA-Z0-9.-]+)?/?$$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_prefix_name	String	Transfer file prefix of an OBS transfer task. This parameter is optional. The value must match the regular expression: $^[a-zA-Z0-9._-]*$$ Minimum length: 1 character. Maximum length: 64 characters. Minimum: <b>1</b> Maximum: <b>64</b>
obs_time_zone	String	Time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone_id</b> must also be specified.
obs_time_zone_id	String	ID of the time zone for an OBS transfer task. For details, see <a href="#">Time Zone List for OBS Transfer</a> . If this parameter is specified, <b>obs_time_zone</b> must also be specified.

Parameter	Type	Description
dis_id	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
dis_name	String	DIS stream ID. This parameter is required when you create a DIS transfer task. Minimum length: 1 character. Maximum length: 128 characters. Minimum: <b>1</b> Maximum: <b>128</b>
kafka_id	String	Kafka ID of a DMS transfer task. This parameter is required when you create a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>36</b> Maximum: <b>36</b>
kafka_topic	String	Kafka topic of a DMS transfer task. Before creating a DMS transfer task, register your Kafka instance with Kafka ID and Kafka topic first. For details, see Registering a DMS Kafka Instance. Minimum: <b>1</b> Maximum: <b>128</b>
obs_transfer_path	String	OBS bucket path, which is the log transfer destination. Minimum: <b>0</b> Maximum: <b>256</b>
obs_eps_id	String	Enterprise project ID of an OBS transfer task. Minimum: <b>0</b> Maximum: <b>128</b>

Parameter	Type	Description
obs_encrypted_enabled	Boolean	Whether OBS bucket encryption is enabled. Enumeration values: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>
tags	Array of strings	If tag delivery is enabled, this field must contain the following host information: <b>hostIP</b> , <b>hostId</b> , <b>hostName</b> , <b>pathFile</b> , and <b>collectTime</b> . The common fields include <b>logStreamName</b> , <b>regionName</b> , <b>logGroupName</b> and <b>projectId</b> , which are optional. The transfer tag <b>streamTag</b> is optional.

**Status code: 400****Table 6-355** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500****Table 6-356** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

If no parameter is specified, all log transfer tasks are returned. If `log_transfer_type`, `log_group_name`, and `log_stream_name` are specified, the corresponding log transfer task is returned.

```
GET https://{endpoint}/v2/{project_id}/transfers
```

```
/v2/{project_id}/transfers /v2/{project_id}/transfers?log_group_name=lbs-group-txxx /v2/{project_id}/
transfers?log_transfer_type=OBS /v2/{project_id}/transfers?log_stream_name=lbs-topic-testRxxx /v2/
{project_id}/transfers?log_group_name=lbs-group-txxx&log_transfer_type=OBS /v2/{project_id}/transfers?
log_group_name=lbs-group-txxx&log_stream_name=lbs-topic-testRxxx /v2/{project_id}/transfers?
log_transfer_type=OBS&log_stream_name=lbs-topic-testRxxx /v2/{project_id}/transfers?log_group_name=lbs-
group-txxx&log_transfer_type=OBS&log_stream_name=lbs-topic-testRxxx
```

## Example Responses

**Status code: 200**

The query is successful.

- The following parameters are returned for an OBS transfer task:

```
{
  "log_transfers": [ {
    "log_group_id": "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
    "log_group_name": "lbs-group-kafka",
    "log_streams": [ {
      "log_stream_id": "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
      "log_stream_name": "lbs-topic-kafka"
    } ],
    "log_transfer_id": "ddced522-233a-4181-a5fc-7b458c819afc",
    "log_transfer_info": {
      "log_create_time": 1634802241847,
      "log_storage_format": "JSON",
      "log_agency_transfer": {
        "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
        "agency_domain_name": "paas_apm_z004xxxxx_xx",
        "agency_name": "test20210325",
        "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",
        "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
        "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"
      },
      "log_transfer_detail": {
        "obs_period": 2,
        "obs_prefix_name": "",
        "obs_period_unit": "min",
        "obs_transfer_path": "/0002/LogTanks/xxx/",
        "obs_bucket_name": "0002",
        "obs_encrypted_enable": false,
        "obs_dir_pre_fix_name": "",
        "obs_time_zone": "UTC+01:00",
        "obs_time_zone_id": "Africa/Lagos"
      },
      "log_transfer_mode": "cycle",
      "log_transfer_status": "ENABLE",
      "log_transfer_type": "OBS"
    }
  } ]
}
```

- The following parameters are returned for a DIS transfer task:

```
{
  "log_transfers": [ {
    "log_group_id": "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
    "log_group_name": "lbs-group-kafka",
    "log_streams": [ {
      "log_stream_id": "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
```

```
"log_stream_name": "lts-topic-kafka"
}],
"log_transfer_id": "ddced522-233a-4181-a5fc-7b458c819afc",
"log_transfer_info": {
  "log_create_time": 1634802241847,
  "log_storage_format": "JSON",
  "log_agency_transfer": {
    "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
    "agency_domain_name": "paas_apm_z004xxxxx_xx",
    "agency_name": "test20210325",
    "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",
    "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
    "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"
  },
  "log_transfer_detail": {
    "dis_id": "xxxxx",
    "dis_name": "xxxxxx"
  },
  "log_transfer_mode": "cycle",
  "log_transfer_status": "ENABLE",
  "log_transfer_type": "OBS"
}
}]
}
```

- The following parameters are returned for a DMS transfer task:

```
{
  "log_transfers": [ {
    "log_group_id": "9a7e2183-2d6d-4732-9a9b-e897fd4e49e0",
    "log_group_name": "lts-group-kafka",
    "log_streams": [ {
      "log_stream_id": "839dac89-35af-4db2-ab4a-a7dda0d0d3f8",
      "log_stream_name": "lts-topic-kafka"
    } ],
    "log_transfer_id": "ddced522-233a-4181-a5fc-7b458c819afc",
    "log_transfer_info": {
      "log_create_time": 1634802241847,
      "log_storage_format": "JSON",
      "log_agency_transfer": {
        "agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
        "agency_domain_name": "paas_apm_z004xxxxx_xx",
        "agency_name": "test20210325",
        "agency_project_id": "2a473356cca5487f8373be891bfxxxxx",
        "be_agency_domain_id": "1d26cc8c86a840e28a4f8d0d078xxxxx",
        "be_agency_project_id": "2a473356cca5487f8373be891bfxxxxx"
      },
      "log_transfer_detail": {
        "kafka_id": "xxxxxx",
        "kafka_topic": "xxxxx"
      },
      "log_transfer_mode": "cycle",
      "log_transfer_status": "ENABLE",
      "log_transfer_type": "OBS"
    }
  }
}]
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.0001",
  "error_msg": "Invalid log transfer type"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{  
  "error_code" : "LTS.0010",  
  "error_msg" : "The system encountered an internal error"  
}
```

## Status Codes

Status Code	Description
200	The query is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.6.6 Registering a DMS Kafka Instance

### Function

This API is used to register a DMS Kafka instance.

Before registering a DMS Kafka instance, configure an inbound rule to allow access from 198.19.128.0/17 over port 9011.

If a network access control list (ACL) has been configured for the subnet of this instance, configure inbound rules for the network ACL to allow access from 198.19.128.0/17 over port 9011.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/lts/dms/kafka-instance



**Table 6-357** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-358** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-359** Request body parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	kafka ID Minimum: <b>1</b> Maximum: <b>36</b>
kafka_name	Yes	String	Kafka name. Minimum: <b>1</b> Maximum: <b>256</b>

Parameter	Mandatory	Type	Description
connect_info	Yes	<a href="#">connect_info</a> object	Kafka connection information. This parameter is required if you have configured <b>SASL_SSL</b> when purchasing the Kafka instance.

**Table 6-360** connect\_info

Parameter	Mandatory	Type	Description
user_name	No	String	Account Minimum: <b>1</b> Maximum: <b>256</b>
pwd	No	String	Password Minimum: <b>1</b> Maximum: <b>256</b>

## Response Parameters

**Status code: 201**

**Table 6-361** Response body parameters

Parameter	Type	Description
instance_id	String	kafka ID

**Status code: 400**

**Table 6-362** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-363** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

Registering a DMS Kafka instance

```
POST https://{endpoint}/v2/{project_id}/lts/dms/kafka-instance
{
  "instance_id" : "3f4a92ff-7f65-489f-a36a-fadbaaxxxx6",
  "kafka_name" : "kafka-wxxxxt",
  "connect_info" : {
    "user_name" : "111",
    "pwd" : "2222"
  }
}
```

## Example Responses

**Status code: 201**

The registration is successful.

```
{
  "instance_id" : "3f4a92ff-7f65-489f-a36a-fadbaaxxxx6"
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.1719",
  "error_msg" : "kafka user or password wrong"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "The system encountered an internal error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

### Registering a DMS Kafka instance

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class RegisterDmsKafkaInstanceSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        RegisterDmsKafkaInstanceRequest request = new RegisterDmsKafkaInstanceRequest();
        RegisterDmsKafkaInstanceRequestBody body = new RegisterDmsKafkaInstanceRequestBody();
        RegisterDmsKafkaInstanceRequestBodyConnectInfo connectInfobody = new
        RegisterDmsKafkaInstanceRequestBodyConnectInfo();
        connectInfobody.userName("111")
            .withPwd("2222");
        body.withConnectInfo(connectInfobody);
        body.withKafkaName("kafka-wxxxxt");
        body.withInstanceId("3f4a92ff-7f65-489f-a36a-fadbaaxxxx6");
        request.withBody(body);
        try {
            RegisterDmsKafkaInstanceResponse response = client.registerDmsKafkaInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

### Registering a DMS Kafka instance

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = RegisterDmsKafkaInstanceRequest()
        connectInfoBody = RegisterDmsKafkaInstanceRequestBodyConnectInfo(
            user_name="111",
            pwd="2222"
        )
        request.body = RegisterDmsKafkaInstanceRequestBody(
            connect_info=connectInfoBody,
            kafka_name="kafka-wxxxxt",
            instance_id="3f4a92ff-7f65-489f-a36a-fadbaaxxxx6"
        )
        response = client.register_dms_kafka_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Registering a DMS Kafka instance

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
```

```

WithAk(ak).
WithSk(sk).
WithProjectId(projectId).
Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.RegisterDmsKafkaInstanceRequest{
    userNameConnectInfo:= "111"
    pwdConnectInfo:= "2222"
    connectInfobody := &model.RegisterDmsKafkaInstanceRequestBodyConnectInfo{
        UserName: &userNameConnectInfo,
        Pwd: &pwdConnectInfo,
    }
    request.Body = &model.RegisterDmsKafkaInstanceRequestBody{
        ConnectInfo: connectInfobody,
        KafkaName: "kafka-wxxxxt",
        InstanceId: "3f4a92ff-7f65-489f-a36a-fadbaaxxxx6",
    }
    response, err := client.RegisterDmsKafkaInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The registration is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.7 Log Collection Beyond Free Quota

## 6.7.1 Disabling Log Collection Beyond Free Quota

### Function

This API is used to configure log collection to stop when the free quota runs out.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/collection/disable

**Table 6-364** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

### Request Parameters

**Table 6-365** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Default: <b>None</b> Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 403**

**Table 6-366** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-367** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Disabling log collection beyond free quota

```
POST https://{endpoint}/v2/{project_id}/collection/disable
/v2/{project_id}/collection/disable
```

## Example Responses

**Status code: 403**

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```



**Status code: 500**

Failed to change the setting of log collection beyond the free quota.

```
{
  "error_code" : "LTS.0210",
  "error_msg" : "Update continue Collection Status error."
}
```

**Status Codes**

Status Code	Description
200	The request is successful.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	Failed to change the setting of log collection beyond the free quota.

**Error Codes**

See [Error Codes](#).

**6.7.2 Enabling Log Collection Beyond Free Quota**

**Function**

This API is used to configure log collection to continue when the free quota runs out.

**Calling Method**

For details, see [Calling APIs](#).

**URI**

POST /v2/{project\_id}/collection/enable

**Table 6-368** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-369** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 403**

**Table 6-370** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-371** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>

Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

Enabling log collection beyond free quota

```
POST https://{endpoint}/v2/{project_id}/collection/enable
/v2/{project_id}/collection/enable
```

## Example Responses

### Status code: 403

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

### Status code: 500

Failed to change the setting of log collection beyond the free quota.

```
{
  "error_code" : "LTS.0210",
  "error_msg" : "Update continue Collection Status error."
}
```

## Status Codes

Status Code	Description
200	The request is successful.
403	Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	Failed to change the setting of log collection beyond the free quota.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.8 Cloud Log Structuring

### 6.8.1 Creating Structuring Configurations (Recommended)

#### Function

This API is used to create structuring configurations using a structuring template, which facilitates parameter extraction and simplifies the parameter structure.

A user can call this API only once per second.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

POST /v3/{project\_id}/lts/struct/template

**Table 6-372** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

#### Request Parameters

**Table 6-373** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-374** Request body parameters

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
template_id	Yes	String	Template ID. When the system template is used, the current attribute can be empty. Minimum: <b>0</b> Maximum: <b>36</b>
template_name	Yes	String	Template name. The template name and ID will be verified. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
template_type	Yes	String	Type of the template. The value can be <b>built_in</b> (system templates) or <b>custom</b> (custom templates). For details about system template types, see section "Log Search and Analysis" > "Cloud Structuring Parsing" > "Structuring Templates" in the LTS User Guide. Enumeration values: <ul style="list-style-type: none"> <li>• <b>built_in</b></li> <li>• <b>custom</b></li> </ul>
demo_fields	No	Array of <b>FieldModel</b> objects	Example field array. You only need to enter the fields whose status is different from that of <b>is_analysis</b> in the template.
tag_fields	No	Array of <b>FieldModel</b> objects	Tag field array. You only need to enter the fields whose status is different from that of <b>is_analysis</b> in the template.
quick_analysis	No	Boolean	Indicates whether to enable quick analysis for <b>demo_fields</b> and <b>tag_fields</b> . If this parameter is set to <b>true</b> , quick analysis is enabled for all fields. If this parameter is left blank or set to <b>false</b> , <b>is_analysis</b> in the template is used to determine whether to enable quick analysis.

**Table 6-375** FieldModel

Parameter	Mandatory	Type	Description
field_name	Yes	String	Field name. Minimum: <b>1</b> Maximum: <b>64</b>
is_analysis	No	Boolean	Whether quick analysis is enabled.

## Response Parameters

Status code: 400

**Table 6-376** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>

Status code: 500

**Table 6-377** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

- Creating an ELB System Template

POST https://{endpoint}/v3/{project\_id}/lts/struct/template

```
{
  "log_group_id": "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
  "log_stream_id": "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
  "demo_fields": [ {
    "field_name": "msec",
    "is_analysis": false
  }, {
    "field_name": "access_log_topic_id",
    "is_analysis": false
  }, {
    "field_name": "time_iso8601",
    "is_analysis": false
  }, {
    "field_name": "log_ver",
    "is_analysis": true
  }, {
    "field_name": "remote_addr",
    "is_analysis": true
  }, {
    "field_name": "remote_port",
    "is_analysis": false
  }
]
```

```
}, {
  "field_name": "status",
  "is_analysis": false
}, {
  "field_name": "request_method",
  "is_analysis": false
}, {
  "field_name": "scheme",
  "is_analysis": true
}, {
  "field_name": "host",
  "is_analysis": true
}, {
  "field_name": "router_request_uri",
  "is_analysis": true
}, {
  "field_name": "server_protocol",
  "is_analysis": true
}, {
  "field_name": "request_length",
  "is_analysis": true
}, {
  "field_name": "bytes_sent",
  "is_analysis": false
}, {
  "field_name": "body_bytes_sent",
  "is_analysis": false
}, {
  "field_name": "request_time",
  "is_analysis": false
}, {
  "field_name": "upstream_status",
  "is_analysis": false
}, {
  "field_name": "upstream_connect_time",
  "is_analysis": false
}, {
  "field_name": "upstream_header_time",
  "is_analysis": false
}, {
  "field_name": "upstream_response_time",
  "is_analysis": false
}, {
  "field_name": "upstream_addr",
  "is_analysis": false
}, {
  "field_name": "http_user_agent",
  "is_analysis": false
}, {
  "field_name": "http_referer",
  "is_analysis": false
}, {
  "field_name": "http_x_forwarded_for",
  "is_analysis": false
}, {
  "field_name": "lb_name",
  "is_analysis": false
}, {
  "field_name": "listener_name",
  "is_analysis": false
}, {
  "field_name": "listener_id",
  "is_analysis": false
}, {
  "field_name": "pool_name",
  "is_analysis": false
}, {
  "field_name": "member_name",
  "is_analysis": false
}
```



```

    }, {
      "field_name": "tenant_id",
      "is_analysis": false
    }, {
      "field_name": "eip_address",
      "is_analysis": false
    }, {
      "field_name": "eip_port",
      "is_analysis": false
    }, {
      "field_name": "upstream_addr_priv",
      "is_analysis": false
    }, {
      "field_name": "certificate_id",
      "is_analysis": false
    }, {
      "field_name": "ssl_protocol",
      "is_analysis": false
    }, {
      "field_name": "ssl_cipher",
      "is_analysis": false
    }, {
      "field_name": "sni_domain_name",
      "is_analysis": false
    }, {
      "field_name": "tcpinfo_rtt",
      "is_analysis": false
    }
  ],
  "tag_fields": [ {
    "field_name": "hostIP",
    "is_analysis": true
  } ],
  "template_type": "built_in",
  "template_name": "ELB",
  "template_id": "",
  "quick_analysis": false
}

```

- **Creating a VPC System Template**

POST [https://{endpoint}/v3/{project\\_id}/lts/struct/template](https://{endpoint}/v3/{project_id}/lts/struct/template)

```

{
  "log_group_id": "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
  "log_stream_id": "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
  "demo_fields": [ {
    "field_name": "version",
    "is_analysis": false
  } ],
  "field_name": "project_id",
  "is_analysis": true
}, {
  "field_name": "interface_id",
  "is_analysis": false
}, {
  "field_name": "srcaddr",
  "is_analysis": true
}, {
  "field_name": "dstaddr",
  "is_analysis": true
}, {
  "field_name": "srcport",
  "is_analysis": false
}, {
  "field_name": "dstport",
  "is_analysis": false
}, {
  "field_name": "protocol",
  "is_analysis": false
}, {
  "field_name": "packets",

```

```
"is_analysis" : false
}, {
  "field_name" : "bytes",
  "is_analysis" : false
}, {
  "field_name" : "start",
  "is_analysis" : false
}, {
  "field_name" : "end",
  "is_analysis" : false
}, {
  "field_name" : "action",
  "is_analysis" : true
}, {
  "field_name" : "log_status",
  "is_analysis" : true
}],
"tag_fields" : [ {
  "field_name" : "hostIP",
  "is_analysis" : true
} ],
"template_type" : "built_in",
"template_name" : "VPC",
"template_id" : "",
"quick_analysis" : false
}
```

## Example Responses

### Status code: 201

The request is successful.

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2014",
  "error_msg" : "template_id is invalid!"
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2014",
  "error_msg" : "Failed to create struct config."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Creating an ELB System Template

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
```

```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateStructConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateStructConfigRequest request = new CreateStructConfigRequest();
        StructConfig body = new StructConfig();
        List<FieldModel> listbodyTagFields = new ArrayList<>();
        listbodyTagFields.add(
            new FieldModel()
                .withFieldName("hostIP")
                .withIsAnalysis(true)
        );
        List<FieldModel> listbodyDemoFields = new ArrayList<>();
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("msec")
                .withIsAnalysis(false)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("access_log_topic_id")
                .withIsAnalysis(false)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("time_iso8601")
                .withIsAnalysis(false)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("log_ver")
                .withIsAnalysis(true)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("remote_addr")
                .withIsAnalysis(true)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("remote_port")
        );
    }
}
```

```
        .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("status")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("request_method")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("scheme")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("host")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("router_request_uri")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("server_protocol")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("request_length")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("bytes_sent")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("body_bytes_sent")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("request_time")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("upstream_status")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("upstream_connect_time")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("upstream_header_time")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
    );
```

```
        .withFieldName("upstream_response_time")
        .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("upstream_addr")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("http_user_agent")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("http_referer")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("http_x_forwarded_for")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("lb_name")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("listener_name")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("listener_id")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("pool_name")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("member_name")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("tenant_id")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("eip_address")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("eip_port")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("upstream_addr_priv")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
```

```
        new FieldModel()
            .withFieldName("certificate_id")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("ssl_protocol")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("ssl_cipher")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("sni_domain_name")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("tcpinfo_rtt")
            .withIsAnalysis(false)
    );
    body.withQuickAnalysis(false);
    body.withTagFields(listbodyTagFields);
    body.withDemoFields(listbodyDemoFields);
    body.withTemplateType(StructConfig.TemplateTypeEnum.fromValue("built_in"));
    body.withTemplateName("ELB");
    body.withTemplateId("");
    body.withLogStreamId("b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx");
    body.withLogGroupId("17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx");
    request.withBody(body);
    try {
        CreateStructConfigResponse response = client.createStructConfig(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

- **Creating a VPC System Template**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateStructConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
```

environment variables and decrypted during use to ensure security.

// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
CreateStructConfigRequest request = new CreateStructConfigRequest();
StructConfig body = new StructConfig();
List<FieldModel> listbodyTagFields = new ArrayList<>();
listbodyTagFields.add(
    new FieldModel()
        .withFieldName("hostIP")
        .withIsAnalysis(true)
);
List<FieldModel> listbodyDemoFields = new ArrayList<>();
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("version")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("project_id")
        .withIsAnalysis(true)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("interface_id")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("srcaddr")
        .withIsAnalysis(true)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("dstaddr")
        .withIsAnalysis(true)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("srcport")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("dstport")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("protocol")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("packets")
```

```
        .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("bytes")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("start")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("end")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("action")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("log_status")
            .withIsAnalysis(true)
    );
    body.withQuickAnalysis(false);
    body.withTagFields(listbodyTagFields);
    body.withDemoFields(listbodyDemoFields);
    body.withTemplateType(StructConfig.TemplateTypeEnum.fromValue("built_in"));
    body.withTemplateName("VPC");
    body.withTemplateId("");
    body.withLogStreamId("b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx");
    body.withLogGroupId("17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx");
    request.withBody(body);
    try {
        CreateStructConfigResponse response = client.createStructConfig(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

- Creating an ELB System Template

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
```



running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = CreateStructConfigRequest()
    listTagFieldsbody = [
        FieldModel(
            field_name="hostIP",
            is_analysis=True
        )
    ]
    listDemoFieldsbody = [
        FieldModel(
            field_name="msec",
            is_analysis=False
        ),
        FieldModel(
            field_name="access_log_topic_id",
            is_analysis=False
        ),
        FieldModel(
            field_name="time_iso8601",
            is_analysis=False
        ),
        FieldModel(
            field_name="log_ver",
            is_analysis=True
        ),
        FieldModel(
            field_name="remote_addr",
            is_analysis=True
        ),
        FieldModel(
            field_name="remote_port",
            is_analysis=False
        ),
        FieldModel(
            field_name="status",
            is_analysis=False
        ),
        FieldModel(
            field_name="request_method",
            is_analysis=False
        ),
        FieldModel(
            field_name="scheme",
            is_analysis=True
        ),
        FieldModel(
            field_name="host",
            is_analysis=True
        ),
        FieldModel(
            field_name="router_request_uri",
            is_analysis=True
        ),
        FieldModel(
            field_name="server_protocol",
            is_analysis=True
        )
    ]
```

```
),
FieldModel(
  field_name="request_length",
  is_analysis=True
),
FieldModel(
  field_name="bytes_sent",
  is_analysis=False
),
FieldModel(
  field_name="body_bytes_sent",
  is_analysis=False
),
FieldModel(
  field_name="request_time",
  is_analysis=False
),
FieldModel(
  field_name="upstream_status",
  is_analysis=False
),
FieldModel(
  field_name="upstream_connect_time",
  is_analysis=False
),
FieldModel(
  field_name="upstream_header_time",
  is_analysis=False
),
FieldModel(
  field_name="upstream_response_time",
  is_analysis=False
),
FieldModel(
  field_name="upstream_addr",
  is_analysis=False
),
FieldModel(
  field_name="http_user_agent",
  is_analysis=False
),
FieldModel(
  field_name="http_referer",
  is_analysis=False
),
FieldModel(
  field_name="http_x_forwarded_for",
  is_analysis=False
),
FieldModel(
  field_name="lb_name",
  is_analysis=False
),
FieldModel(
  field_name="listener_name",
  is_analysis=False
),
FieldModel(
  field_name="listener_id",
  is_analysis=False
),
FieldModel(
  field_name="pool_name",
  is_analysis=False
),
FieldModel(
  field_name="member_name",
  is_analysis=False
),
),
```

```
FieldModel(
    field_name="tenant_id",
    is_analysis=False
),
FieldModel(
    field_name="eip_address",
    is_analysis=False
),
FieldModel(
    field_name="eip_port",
    is_analysis=False
),
FieldModel(
    field_name="upstream_addr_priv",
    is_analysis=False
),
FieldModel(
    field_name="certificate_id",
    is_analysis=False
),
FieldModel(
    field_name="ssl_protocol",
    is_analysis=False
),
FieldModel(
    field_name="ssl_cipher",
    is_analysis=False
),
FieldModel(
    field_name="sni_domain_name",
    is_analysis=False
),
FieldModel(
    field_name="tcpinfo_rtt",
    is_analysis=False
)
]
request.body = StructConfig(
    quick_analysis=False,
    tag_fields=listTagFieldsbody,
    demo_fields=listDemoFieldsbody,
    template_type="built_in",
    template_name="ELB",
    template_id="",
    log_stream_id="b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
    log_group_id="17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx"
)
response = client.create_struct_config(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- **Creating a VPC System Template**

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *
```

```
if __name__ == "__main__":
```

```
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    environment variables and decrypted during use to ensure security.
```

```
    # In this example, AK and SK are stored in environment variables for authentication. Before
    running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
```

```
environment
ak = os.getenv("CLOUD_SDK_AK")
sk = os.getenv("CLOUD_SDK_SK")
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
.with_credentials(credentials) \
.with_region(LtsRegion.value_of("<YOUR REGION>")) \
.build()

try:
request = CreateStructConfigRequest()
listTagFieldsbody = [
    FieldModel(
        field_name="hostIP",
        is_analysis=True
    )
]
listDemoFieldsbody = [
    FieldModel(
        field_name="version",
        is_analysis=False
    ),
    FieldModel(
        field_name="project_id",
        is_analysis=True
    ),
    FieldModel(
        field_name="interface_id",
        is_analysis=False
    ),
    FieldModel(
        field_name="srcaddr",
        is_analysis=True
    ),
    FieldModel(
        field_name="dstaddr",
        is_analysis=True
    ),
    FieldModel(
        field_name="srcport",
        is_analysis=False
    ),
    FieldModel(
        field_name="dstport",
        is_analysis=False
    ),
    FieldModel(
        field_name="protocol",
        is_analysis=False
    ),
    FieldModel(
        field_name="packets",
        is_analysis=False
    ),
    FieldModel(
        field_name="bytes",
        is_analysis=False
    ),
    FieldModel(
        field_name="start",
        is_analysis=False
    ),
    FieldModel(
        field_name="end",
        is_analysis=False
    ),
]
```

```
        FieldModel(
            field_name="action",
            is_analysis=True
        ),
        FieldModel(
            field_name="log_status",
            is_analysis=True
        )
    ]
    request.body = StructConfig(
        quick_analysis=False,
        tag_fields=listTagFieldsbody,
        demo_fields=listDemoFieldsbody,
        template_type="built_in",
        template_name="VPC",
        template_id="",
        log_stream_id="b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
        log_group_id="17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx"
    )
    response = client.create_struct_config(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

- Creating an ELB System Template

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateStructConfigRequest{
        isAnalysisTagFields: true
    }
    var listTagFieldsbody = []model.FieldModel{
        {
            FieldName: "hostIP",
            IsAnalysis: &isAnalysisTagFields,
        }
    }
}
```

```
    },  
  }  
  isAnalysisDemoFields:= false  
  isAnalysisDemoFields1:= false  
  isAnalysisDemoFields2:= false  
  isAnalysisDemoFields3:= true  
  isAnalysisDemoFields4:= true  
  isAnalysisDemoFields5:= false  
  isAnalysisDemoFields6:= false  
  isAnalysisDemoFields7:= false  
  isAnalysisDemoFields8:= true  
  isAnalysisDemoFields9:= true  
  isAnalysisDemoFields10:= true  
  isAnalysisDemoFields11:= true  
  isAnalysisDemoFields12:= true  
  isAnalysisDemoFields13:= false  
  isAnalysisDemoFields14:= false  
  isAnalysisDemoFields15:= false  
  isAnalysisDemoFields16:= false  
  isAnalysisDemoFields17:= false  
  isAnalysisDemoFields18:= false  
  isAnalysisDemoFields19:= false  
  isAnalysisDemoFields20:= false  
  isAnalysisDemoFields21:= false  
  isAnalysisDemoFields22:= false  
  isAnalysisDemoFields23:= false  
  isAnalysisDemoFields24:= false  
  isAnalysisDemoFields25:= false  
  isAnalysisDemoFields26:= false  
  isAnalysisDemoFields27:= false  
  isAnalysisDemoFields28:= false  
  isAnalysisDemoFields29:= false  
  isAnalysisDemoFields30:= false  
  isAnalysisDemoFields31:= false  
  isAnalysisDemoFields32:= false  
  isAnalysisDemoFields33:= false  
  isAnalysisDemoFields34:= false  
  isAnalysisDemoFields35:= false  
  isAnalysisDemoFields36:= false  
  isAnalysisDemoFields37:= false  
  var listDemoFieldsbody = []model.FieldModel{  
    {  
      FieldName: "msec",  
      IsAnalysis: &isAnalysisDemoFields,  
    },  
    {  
      FieldName: "access_log_topic_id",  
      IsAnalysis: &isAnalysisDemoFields1,  
    },  
    {  
      FieldName: "time_iso8601",  
      IsAnalysis: &isAnalysisDemoFields2,  
    },  
    {  
      FieldName: "log_ver",  
      IsAnalysis: &isAnalysisDemoFields3,  
    },  
    {  
      FieldName: "remote_addr",  
      IsAnalysis: &isAnalysisDemoFields4,  
    },  
    {  
      FieldName: "remote_port",  
      IsAnalysis: &isAnalysisDemoFields5,  
    },  
    {  
      FieldName: "status",  
      IsAnalysis: &isAnalysisDemoFields6,  
    },  
  },  
}
```

```
{
  fieldName: "request_method",
  isAnalysis: &isAnalysisDemoFields7,
},
{
  fieldName: "scheme",
  isAnalysis: &isAnalysisDemoFields8,
},
{
  fieldName: "host",
  isAnalysis: &isAnalysisDemoFields9,
},
{
  fieldName: "router_request_uri",
  isAnalysis: &isAnalysisDemoFields10,
},
{
  fieldName: "server_protocol",
  isAnalysis: &isAnalysisDemoFields11,
},
{
  fieldName: "request_length",
  isAnalysis: &isAnalysisDemoFields12,
},
{
  fieldName: "bytes_sent",
  isAnalysis: &isAnalysisDemoFields13,
},
{
  fieldName: "body_bytes_sent",
  isAnalysis: &isAnalysisDemoFields14,
},
{
  fieldName: "request_time",
  isAnalysis: &isAnalysisDemoFields15,
},
{
  fieldName: "upstream_status",
  isAnalysis: &isAnalysisDemoFields16,
},
{
  fieldName: "upstream_connect_time",
  isAnalysis: &isAnalysisDemoFields17,
},
{
  fieldName: "upstream_header_time",
  isAnalysis: &isAnalysisDemoFields18,
},
{
  fieldName: "upstream_response_time",
  isAnalysis: &isAnalysisDemoFields19,
},
{
  fieldName: "upstream_addr",
  isAnalysis: &isAnalysisDemoFields20,
},
{
  fieldName: "http_user_agent",
  isAnalysis: &isAnalysisDemoFields21,
},
{
  fieldName: "http_referer",
  isAnalysis: &isAnalysisDemoFields22,
},
{
  fieldName: "http_x_forwarded_for",
  isAnalysis: &isAnalysisDemoFields23,
},
{
```

```

        FieldName: "lb_name",
        IsAnalysis: &isAnalysisDemoFields24,
    },
    {
        FieldName: "listener_name",
        IsAnalysis: &isAnalysisDemoFields25,
    },
    {
        FieldName: "listener_id",
        IsAnalysis: &isAnalysisDemoFields26,
    },
    {
        FieldName: "pool_name",
        IsAnalysis: &isAnalysisDemoFields27,
    },
    {
        FieldName: "member_name",
        IsAnalysis: &isAnalysisDemoFields28,
    },
    {
        FieldName: "tenant_id",
        IsAnalysis: &isAnalysisDemoFields29,
    },
    {
        FieldName: "eip_address",
        IsAnalysis: &isAnalysisDemoFields30,
    },
    {
        FieldName: "eip_port",
        IsAnalysis: &isAnalysisDemoFields31,
    },
    {
        FieldName: "upstream_addr_priv",
        IsAnalysis: &isAnalysisDemoFields32,
    },
    {
        FieldName: "certificate_id",
        IsAnalysis: &isAnalysisDemoFields33,
    },
    {
        FieldName: "ssl_protocol",
        IsAnalysis: &isAnalysisDemoFields34,
    },
    {
        FieldName: "ssl_cipher",
        IsAnalysis: &isAnalysisDemoFields35,
    },
    {
        FieldName: "sni_domain_name",
        IsAnalysis: &isAnalysisDemoFields36,
    },
    {
        FieldName: "tcpinfo_rtt",
        IsAnalysis: &isAnalysisDemoFields37,
    },
}
quickAnalysisStructConfig:= false
request.Body = &model.StructConfig{
    QuickAnalysis: &quickAnalysisStructConfig,
    TagFields: &listTagFieldsbody,
    DemoFields: &listDemoFieldsbody,
    TemplateType: model.GetStructConfigTemplateTypeEnum().BUILT_IN,
    TemplateName: "ELB",
    TemplateId: "",
    LogStreamId: "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
    LogGroupId: "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
}
response, err := client.CreateStructConfig(request)
if err == nil {

```



```
    fmt.Printf("%+v\n", response)
  } else {
    fmt.Println(err)
  }
}
```

- **Creating a VPC System Template**

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateStructConfigRequest{}
    isAnalysisTagFields:= true
    var listTagFieldsbody = []model.FieldModel{
        {
            FieldName: "hostIP",
            IsAnalysis: &isAnalysisTagFields,
        },
    }
    isAnalysisDemoFields:= false
    isAnalysisDemoFields1:= true
    isAnalysisDemoFields2:= false
    isAnalysisDemoFields3:= true
    isAnalysisDemoFields4:= true
    isAnalysisDemoFields5:= false
    isAnalysisDemoFields6:= false
    isAnalysisDemoFields7:= false
    isAnalysisDemoFields8:= false
    isAnalysisDemoFields9:= false
    isAnalysisDemoFields10:= false
    isAnalysisDemoFields11:= false
    isAnalysisDemoFields12:= true
    isAnalysisDemoFields13:= true
    var listDemoFieldsbody = []model.FieldModel{
        {
            FieldName: "version",
            IsAnalysis: &isAnalysisDemoFields,
        },
        {
            FieldName: "project_id",
            IsAnalysis: &isAnalysisDemoFields1,
        },
    }
}
```

```
    },
    {
        FieldName: "interface_id",
        IsAnalysis: &isAnalysisDemoFields2,
    },
    {
        FieldName: "srcaddr",
        IsAnalysis: &isAnalysisDemoFields3,
    },
    {
        FieldName: "dstaddr",
        IsAnalysis: &isAnalysisDemoFields4,
    },
    {
        FieldName: "srcport",
        IsAnalysis: &isAnalysisDemoFields5,
    },
    {
        FieldName: "dstport",
        IsAnalysis: &isAnalysisDemoFields6,
    },
    {
        FieldName: "protocol",
        IsAnalysis: &isAnalysisDemoFields7,
    },
    {
        FieldName: "packets",
        IsAnalysis: &isAnalysisDemoFields8,
    },
    {
        FieldName: "bytes",
        IsAnalysis: &isAnalysisDemoFields9,
    },
    {
        FieldName: "start",
        IsAnalysis: &isAnalysisDemoFields10,
    },
    {
        FieldName: "end",
        IsAnalysis: &isAnalysisDemoFields11,
    },
    {
        FieldName: "action",
        IsAnalysis: &isAnalysisDemoFields12,
    },
    {
        FieldName: "log_status",
        IsAnalysis: &isAnalysisDemoFields13,
    },
}
quickAnalysisStructConfig:= false
request.Body = &model.StructConfig{
    QuickAnalysis: &quickAnalysisStructConfig,
    TagFields: &listTagFieldsbody,
    DemoFields: &listDemoFieldsbody,
    TemplateType: model.GetStructConfigTemplateTypeEnum().BUILT_IN,
    TemplateName: "VPC",
    TemplateId: "",
    LogStreamId: "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
    LogGroupId: "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
}
response, err := client.CreateStructConfig(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.8.2 Modifying Structuring Configurations (Recommended)

### Function

This API is used to modify structuring configurations using a structuring template.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v3/{project\_id}/lts/struct/template

**Table 6-378** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-379** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-380** Request body parameters

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
template_id	Yes	String	Template ID. When the system template is used, the current attribute can be empty. Minimum: <b>0</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
template_name	Yes	String	Template name. The template name and ID will be verified. Minimum: <b>1</b> Maximum: <b>64</b>
template_type	Yes	String	Type of the template. The value can be <b>built_in</b> (system templates) or <b>custom</b> (custom templates). For details about system template types, see section "Log Search and Analysis" > "Cloud Structuring Parsing" > "Structuring Templates" in the LTS User Guide. Enumeration values: <ul style="list-style-type: none"> <li>• <b>built_in</b></li> <li>• <b>custom</b></li> </ul>
demo_fields	No	Array of <b>FieldModel</b> objects	Example field array. You only need to enter the fields whose status is different from that of <b>is_analysis</b> in the template.
tag_fields	No	Array of <b>FieldModel</b> objects	Tag field array. You only need to enter the fields whose status is different from that of <b>is_analysis</b> in the template.
quick_analysis	No	Boolean	Indicates whether to enable quick analysis for <b>demo_fields</b> and <b>tag_fields</b> . If this parameter is set to <b>true</b> , quick analysis is enabled for all fields. If this parameter is left blank or set to <b>false</b> , <b>is_analysis</b> in the template is used to determine whether to enable quick analysis.

**Table 6-381** FieldModel

Parameter	Mandatory	Type	Description
field_name	Yes	String	Field name. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
is_analysis	No	Boolean	Whether quick analysis is enabled.

## Response Parameters

**Status code: 201**

**Table 6-382** Response body parameters

Parameter	Type	Description
-	String	

**Status code: 400**

**Table 6-383** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-384** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

- Modifying an ELB System Template

```
PUT https://{endpoint}/v3/{project_id}/lts/struct/template
```

```
{
  "log_group_id" : "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
```

```
"log_stream_id" : "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
"demo_fields" : [ {
  "field_name" : "msec",
  "is_analysis" : false
}, {
  "field_name" : "access_log_topic_id",
  "is_analysis" : false
}, {
  "field_name" : "time_iso8601",
  "is_analysis" : false
}, {
  "field_name" : "log_ver",
  "is_analysis" : true
}, {
  "field_name" : "remote_addr",
  "is_analysis" : true
}, {
  "field_name" : "remote_port",
  "is_analysis" : false
}, {
  "field_name" : "status",
  "is_analysis" : false
}, {
  "field_name" : "request_method",
  "is_analysis" : false
}, {
  "field_name" : "scheme",
  "is_analysis" : true
}, {
  "field_name" : "host",
  "is_analysis" : true
}, {
  "field_name" : "router_request_uri",
  "is_analysis" : true
}, {
  "field_name" : "server_protocol",
  "is_analysis" : true
}, {
  "field_name" : "request_length",
  "is_analysis" : true
}, {
  "field_name" : "bytes_sent",
  "is_analysis" : false
}, {
  "field_name" : "body_bytes_sent",
  "is_analysis" : false
}, {
  "field_name" : "request_time",
  "is_analysis" : false
}, {
  "field_name" : "upstream_status",
  "is_analysis" : false
}, {
  "field_name" : "upstream_connect_time",
  "is_analysis" : false
}, {
  "field_name" : "upstream_header_time",
  "is_analysis" : false
}, {
  "field_name" : "upstream_response_time",
  "is_analysis" : false
}, {
  "field_name" : "upstream_addr",
  "is_analysis" : false
}, {
  "field_name" : "http_user_agent",
  "is_analysis" : false
}, {
  "field_name" : "http_referer",
```

```

    "is_analysis" : false
  }, {
    "field_name" : "http_x_forwarded_for",
    "is_analysis" : false
  }, {
    "field_name" : "lb_name",
    "is_analysis" : false
  }, {
    "field_name" : "listener_name",
    "is_analysis" : false
  }, {
    "field_name" : "listener_id",
    "is_analysis" : false
  }, {
    "field_name" : "pool_name",
    "is_analysis" : false
  }, {
    "field_name" : "member_name",
    "is_analysis" : false
  }, {
    "field_name" : "tenant_id",
    "is_analysis" : false
  }, {
    "field_name" : "eip_address",
    "is_analysis" : false
  }, {
    "field_name" : "eip_port",
    "is_analysis" : false
  }, {
    "field_name" : "upstream_addr_priv",
    "is_analysis" : false
  }, {
    "field_name" : "certificate_id",
    "is_analysis" : false
  }, {
    "field_name" : "ssl_protocol",
    "is_analysis" : false
  }, {
    "field_name" : "ssl_cipher",
    "is_analysis" : false
  }, {
    "field_name" : "sni_domain_name",
    "is_analysis" : false
  }, {
    "field_name" : "tcpinfo_rtt",
    "is_analysis" : false
  } ],
  "tag_fields" : [ {
    "field_name" : "hostIP",
    "is_analysis" : true
  } ],
  "template_type" : "built_in",
  "template_name" : "ELB",
  "template_id" : "",
  "quick_analysis" : false
}

```

- **Modifying a VPC System Template**

PUT [https://{endpoint}/v3/{project\\_id}/lts/struct/template](https://{endpoint}/v3/{project_id}/lts/struct/template)

```

{
  "log_group_id" : "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
  "log_stream_id" : "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
  "demo_fields" : [ {
    "field_name" : "version"
  } ],
  "field_name" : "project_id"
}, {
  "field_name" : "interface_id"
}, {
}

```



```
"field_name" : "srcaddr"
}, {
  "field_name" : "dstaddr"
}, {
  "field_name" : "srcport"
}, {
  "field_name" : "dstport"
}, {
  "field_name" : "protocol"
}, {
  "field_name" : "packets"
}, {
  "field_name" : "bytes"
}, {
  "field_name" : "start"
}, {
  "field_name" : "end"
}, {
  "field_name" : "action"
}, {
  "field_name" : "log_status"
}],
"tag_fields" : [ {
  "field_name" : "hostIP",
  "is_analysis" : true
}],
"template_type" : "built_in",
"template_name" : "VPC",
"template_id" : "",
"quick_analysis" : false
}
```

## Example Responses

### Status code: 201

The request is successful.

```
""
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2014",
  "error_msg" : "Failed to create struct config."
  "preciseEndTime" : 0,
  "preciseStartTime" : 0
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2016",
  "error_msg" : "Failed to update struct config"
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

- Modifying an ELB System Template

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateStructConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateStructConfigRequest request = new UpdateStructConfigRequest();
        StructConfig body = new StructConfig();
        List<FieldModel> listbodyTagFields = new ArrayList<>();
        listbodyTagFields.add(
            new FieldModel()
                .withFieldName("hostIP")
                .withIsAnalysis(true)
        );
        List<FieldModel> listbodyDemoFields = new ArrayList<>();
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("msec")
                .withIsAnalysis(false)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("access_log_topic_id")
                .withIsAnalysis(false)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("time_iso8601")
                .withIsAnalysis(false)
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("log_ver")
                .withIsAnalysis(true)
        );
        listbodyDemoFields.add(
```

```
        new FieldModel()
            .withFieldName("remote_addr")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("remote_port")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("status")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("request_method")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("scheme")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("host")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("router_request_uri")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("server_protocol")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("request_length")
            .withIsAnalysis(true)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("bytes_sent")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("body_bytes_sent")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("request_time")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("upstream_status")
            .withIsAnalysis(false)
    );
    listbodyDemoFields.add(
        new FieldModel()
            .withFieldName("upstream_connect_time")
            .withIsAnalysis(false)
    );
    );
```

```
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("upstream_header_time")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("upstream_response_time")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("upstream_addr")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("http_user_agent")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("http_referer")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("http_x_forwarded_for")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("lb_name")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("listener_name")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("listener_id")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("pool_name")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("member_name")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("tenant_id")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("eip_address")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("eip_port")
        .withIsAnalysis(false)
);
```

```
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("upstream_addr_priv")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("certificate_id")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("ssl_protocol")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("ssl_cipher")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("sni_domain_name")
        .withIsAnalysis(false)
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("tcpinfo_rtt")
        .withIsAnalysis(false)
);
body.withQuickAnalysis(false);
body.withTagFields(listbodyTagFields);
body.withDemoFields(listbodyDemoFields);
body.withTemplateType(StructConfig.TemplateTypeEnum.fromValue("built_in"));
body.withTemplateName("ELB");
body.withTemplateId("");
body.withLogStreamId("b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx");
body.withLogGroupId("17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx");
request.withBody(body);
try {
    UpdateStructConfigResponse response = client.updateStructConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
}
```

- **Modifying a VPC System Template**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
```

```
import java.util.ArrayList;

public class UpdateStructConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateStructConfigRequest request = new UpdateStructConfigRequest();
        StructConfig body = new StructConfig();
        List<FieldModel> listbodyTagFields = new ArrayList<>();
        listbodyTagFields.add(
            new FieldModel()
                .withFieldName("hostIP")
                .withIsAnalysis(true)
        );
        List<FieldModel> listbodyDemoFields = new ArrayList<>();
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("version")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("project_id")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("interface_id")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("srcaddr")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("dstaddr")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("srcport")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("dstport")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("protocol")
        );
        listbodyDemoFields.add(
            new FieldModel()
                .withFieldName("packets")
        );
    }
}
```

```
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("bytes")
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("start")
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("end")
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("action")
);
listbodyDemoFields.add(
    new FieldModel()
        .withFieldName("log_status")
);
body.withQuickAnalysis(false);
body.withTagFields(listbodyTagFields);
body.withDemoFields(listbodyDemoFields);
body.withTemplateType(StructConfig.TemplateTypeEnum.fromValue("built_in"));
body.withTemplateName("VPC");
body.withTemplateId("");
body.withLogStreamId("b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx");
body.withLogGroupId("17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx");
request.withBody(body);
try {
    UpdateStructConfigResponse response = client.updateStructConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

- Modifying an ELB System Template

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)
```

```
client = LtsClient.new_builder() \  
  .with_credentials(credentials) \  
  .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
  .build()  
  
try:  
  request = UpdateStructConfigRequest()  
  listTagFieldsbody = [  
    FieldModel(  
      field_name="hostIP",  
      is_analysis=True  
    )  
  ]  
  listDemoFieldsbody = [  
    FieldModel(  
      field_name="msec",  
      is_analysis=False  
    ),  
    FieldModel(  
      field_name="access_log_topic_id",  
      is_analysis=False  
    ),  
    FieldModel(  
      field_name="time_iso8601",  
      is_analysis=False  
    ),  
    FieldModel(  
      field_name="log_ver",  
      is_analysis=True  
    ),  
    FieldModel(  
      field_name="remote_addr",  
      is_analysis=True  
    ),  
    FieldModel(  
      field_name="remote_port",  
      is_analysis=False  
    ),  
    FieldModel(  
      field_name="status",  
      is_analysis=False  
    ),  
    FieldModel(  
      field_name="request_method",  
      is_analysis=False  
    ),  
    FieldModel(  
      field_name="scheme",  
      is_analysis=True  
    ),  
    FieldModel(  
      field_name="host",  
      is_analysis=True  
    ),  
    FieldModel(  
      field_name="router_request_uri",  
      is_analysis=True  
    ),  
    FieldModel(  
      field_name="server_protocol",  
      is_analysis=True  
    ),  
    FieldModel(  
      field_name="request_length",  
      is_analysis=True  
    ),  
    FieldModel(  
      field_name="bytes_sent",
```



```
        is_analysis=False
    ),
    FieldModel(
        field_name="body_bytes_sent",
        is_analysis=False
    ),
    FieldModel(
        field_name="request_time",
        is_analysis=False
    ),
    FieldModel(
        field_name="upstream_status",
        is_analysis=False
    ),
    FieldModel(
        field_name="upstream_connect_time",
        is_analysis=False
    ),
    FieldModel(
        field_name="upstream_header_time",
        is_analysis=False
    ),
    FieldModel(
        field_name="upstream_response_time",
        is_analysis=False
    ),
    FieldModel(
        field_name="upstream_addr",
        is_analysis=False
    ),
    FieldModel(
        field_name="http_user_agent",
        is_analysis=False
    ),
    FieldModel(
        field_name="http_referer",
        is_analysis=False
    ),
    FieldModel(
        field_name="http_x_forwarded_for",
        is_analysis=False
    ),
    FieldModel(
        field_name="lb_name",
        is_analysis=False
    ),
    FieldModel(
        field_name="listener_name",
        is_analysis=False
    ),
    FieldModel(
        field_name="listener_id",
        is_analysis=False
    ),
    FieldModel(
        field_name="pool_name",
        is_analysis=False
    ),
    FieldModel(
        field_name="member_name",
        is_analysis=False
    ),
    FieldModel(
        field_name="tenant_id",
        is_analysis=False
    ),
    FieldModel(
        field_name="eip_address",
        is_analysis=False
    )
```

```
),
FieldModel(
    field_name="eip_port",
    is_analysis=False
),
FieldModel(
    field_name="upstream_addr_priv",
    is_analysis=False
),
FieldModel(
    field_name="certificate_id",
    is_analysis=False
),
FieldModel(
    field_name="ssl_protocol",
    is_analysis=False
),
FieldModel(
    field_name="ssl_cipher",
    is_analysis=False
),
FieldModel(
    field_name="sni_domain_name",
    is_analysis=False
),
FieldModel(
    field_name="tcpinfo_rtt",
    is_analysis=False
)
]
request.body = StructConfig(
    quick_analysis=False,
    tag_fields=listTagFieldsbody,
    demo_fields=listDemoFieldsbody,
    template_type="built_in",
    template_name="ELB",
    template_id="",
    log_stream_id="b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
    log_group_id="17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx"
)
response = client.update_struct_config(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- **Modifying a VPC System Template**

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)
```

```
client = LtsClient.new_builder() \  
  .with_credentials(credentials) \  
  .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
  .build()  
  
try:  
  request = UpdateStructConfigRequest()  
  listTagFieldsbody = [  
    FieldModel(  
      field_name="hostIP",  
      is_analysis=True  
    )  
  ]  
  listDemoFieldsbody = [  
    FieldModel(  
      field_name="version"  
    ),  
    FieldModel(  
      field_name="project_id"  
    ),  
    FieldModel(  
      field_name="interface_id"  
    ),  
    FieldModel(  
      field_name="srcaddr"  
    ),  
    FieldModel(  
      field_name="dstaddr"  
    ),  
    FieldModel(  
      field_name="srcport"  
    ),  
    FieldModel(  
      field_name="dstport"  
    ),  
    FieldModel(  
      field_name="protocol"  
    ),  
    FieldModel(  
      field_name="packets"  
    ),  
    FieldModel(  
      field_name="bytes"  
    ),  
    FieldModel(  
      field_name="start"  
    ),  
    FieldModel(  
      field_name="end"  
    ),  
    FieldModel(  
      field_name="action"  
    ),  
    FieldModel(  
      field_name="log_status"  
    )  
  ]  
  request.body = StructConfig(  
    quick_analysis=False,  
    tag_fields=listTagFieldsbody,  
    demo_fields=listDemoFieldsbody,  
    template_type="built_in",  
    template_name="VPC",  
    template_id="",  
    log_stream_id="b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",  
    log_group_id="17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx"  
  )  
  response = client.update_struct_config(request)  
  print(response)
```

```
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

- Modifying an ELB System Template

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateStructConfigRequest{}
    isAnalysisTagFields:= true
    var listTagFieldsbody = []model.FieldModel{
        {
            FieldName: "hostIP",
            IsAnalysis: &isAnalysisTagFields,
        },
    }
    isAnalysisDemoFields:= false
    isAnalysisDemoFields1:= false
    isAnalysisDemoFields2:= false
    isAnalysisDemoFields3:= true
    isAnalysisDemoFields4:= true
    isAnalysisDemoFields5:= false
    isAnalysisDemoFields6:= false
    isAnalysisDemoFields7:= false
    isAnalysisDemoFields8:= true
    isAnalysisDemoFields9:= true
    isAnalysisDemoFields10:= true
    isAnalysisDemoFields11:= true
    isAnalysisDemoFields12:= true
    isAnalysisDemoFields13:= false
    isAnalysisDemoFields14:= false
    isAnalysisDemoFields15:= false
    isAnalysisDemoFields16:= false
    isAnalysisDemoFields17:= false
    isAnalysisDemoFields18:= false
```

```
isAnalysisDemoFields19:= false
isAnalysisDemoFields20:= false
isAnalysisDemoFields21:= false
isAnalysisDemoFields22:= false
isAnalysisDemoFields23:= false
isAnalysisDemoFields24:= false
isAnalysisDemoFields25:= false
isAnalysisDemoFields26:= false
isAnalysisDemoFields27:= false
isAnalysisDemoFields28:= false
isAnalysisDemoFields29:= false
isAnalysisDemoFields30:= false
isAnalysisDemoFields31:= false
isAnalysisDemoFields32:= false
isAnalysisDemoFields33:= false
isAnalysisDemoFields34:= false
isAnalysisDemoFields35:= false
isAnalysisDemoFields36:= false
isAnalysisDemoFields37:= false
var listDemoFieldsbody = []model.FieldModel{
    {
        FieldName: "msec",
        IsAnalysis: &isAnalysisDemoFields,
    },
    {
        FieldName: "access_log_topic_id",
        IsAnalysis: &isAnalysisDemoFields1,
    },
    {
        FieldName: "time_iso8601",
        IsAnalysis: &isAnalysisDemoFields2,
    },
    {
        FieldName: "log_ver",
        IsAnalysis: &isAnalysisDemoFields3,
    },
    {
        FieldName: "remote_addr",
        IsAnalysis: &isAnalysisDemoFields4,
    },
    {
        FieldName: "remote_port",
        IsAnalysis: &isAnalysisDemoFields5,
    },
    {
        FieldName: "status",
        IsAnalysis: &isAnalysisDemoFields6,
    },
    {
        FieldName: "request_method",
        IsAnalysis: &isAnalysisDemoFields7,
    },
    {
        FieldName: "scheme",
        IsAnalysis: &isAnalysisDemoFields8,
    },
    {
        FieldName: "host",
        IsAnalysis: &isAnalysisDemoFields9,
    },
    {
        FieldName: "router_request_uri",
        IsAnalysis: &isAnalysisDemoFields10,
    },
    {
        FieldName: "server_protocol",
        IsAnalysis: &isAnalysisDemoFields11,
    },
    {
```

```
    fieldName: "request_length",
    isAnalysis: &isAnalysisDemoFields12,
  },
  {
    fieldName: "bytes_sent",
    isAnalysis: &isAnalysisDemoFields13,
  },
  {
    fieldName: "body_bytes_sent",
    isAnalysis: &isAnalysisDemoFields14,
  },
  {
    fieldName: "request_time",
    isAnalysis: &isAnalysisDemoFields15,
  },
  {
    fieldName: "upstream_status",
    isAnalysis: &isAnalysisDemoFields16,
  },
  {
    fieldName: "upstream_connect_time",
    isAnalysis: &isAnalysisDemoFields17,
  },
  {
    fieldName: "upstream_header_time",
    isAnalysis: &isAnalysisDemoFields18,
  },
  {
    fieldName: "upstream_response_time",
    isAnalysis: &isAnalysisDemoFields19,
  },
  {
    fieldName: "upstream_addr",
    isAnalysis: &isAnalysisDemoFields20,
  },
  {
    fieldName: "http_user_agent",
    isAnalysis: &isAnalysisDemoFields21,
  },
  {
    fieldName: "http_referer",
    isAnalysis: &isAnalysisDemoFields22,
  },
  {
    fieldName: "http_x_forwarded_for",
    isAnalysis: &isAnalysisDemoFields23,
  },
  {
    fieldName: "lb_name",
    isAnalysis: &isAnalysisDemoFields24,
  },
  {
    fieldName: "listener_name",
    isAnalysis: &isAnalysisDemoFields25,
  },
  {
    fieldName: "listener_id",
    isAnalysis: &isAnalysisDemoFields26,
  },
  {
    fieldName: "pool_name",
    isAnalysis: &isAnalysisDemoFields27,
  },
  {
    fieldName: "member_name",
    isAnalysis: &isAnalysisDemoFields28,
  },
  {
    fieldName: "tenant_id",
```

```
    IsAnalysis: &isAnalysisDemoFields29,
  },
  {
    FileName: "eip_address",
    IsAnalysis: &isAnalysisDemoFields30,
  },
  {
    FileName: "eip_port",
    IsAnalysis: &isAnalysisDemoFields31,
  },
  {
    FileName: "upstream_addr_priv",
    IsAnalysis: &isAnalysisDemoFields32,
  },
  {
    FileName: "certificate_id",
    IsAnalysis: &isAnalysisDemoFields33,
  },
  {
    FileName: "ssl_protocol",
    IsAnalysis: &isAnalysisDemoFields34,
  },
  {
    FileName: "ssl_cipher",
    IsAnalysis: &isAnalysisDemoFields35,
  },
  {
    FileName: "sni_domain_name",
    IsAnalysis: &isAnalysisDemoFields36,
  },
  {
    FileName: "tcpinfo_rtt",
    IsAnalysis: &isAnalysisDemoFields37,
  },
}
quickAnalysisStructConfig:= false
request.Body = &model.StructConfig{
    QuickAnalysis: &quickAnalysisStructConfig,
    TagFields: &listTagFieldsbody,
    DemoFields: &listDemoFieldsbody,
    TemplateType: model.GetStructConfigTemplateTypeEnum().BUILT_IN,
    TemplateName: "ELB",
    TemplateId: "",
    LogStreamId: "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
    LogGroupId: "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
}
response, err := client.UpdateStructConfig(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- **Modifying a VPC System Template**

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
```

running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateStructConfigRequest{}
isAnalysisTagFields:= true
var listTagFieldsbody = []model.FieldModel{
    {
        FieldName: "hostIP",
        IsAnalysis: &isAnalysisTagFields,
    },
}
var listDemoFieldsbody = []model.FieldModel{
    {
        FieldName: "version",
    },
    {
        FieldName: "project_id",
    },
    {
        FieldName: "interface_id",
    },
    {
        FieldName: "srcaddr",
    },
    {
        FieldName: "dstaddr",
    },
    {
        FieldName: "srcport",
    },
    {
        FieldName: "dstport",
    },
    {
        FieldName: "protocol",
    },
    {
        FieldName: "packets",
    },
    {
        FieldName: "bytes",
    },
    {
        FieldName: "start",
    },
    {
        FieldName: "end",
    },
    {
        FieldName: "action",
    },
    {
        FieldName: "log_status",
    },
}
```



```

}
quickAnalysisStructConfig:= false
request.Body = &model.StructConfig{
    QuickAnalysis: &quickAnalysisStructConfig,
    TagFields: &listTagFieldsbody,
    DemoFields: &listDemoFieldsbody,
    TemplateType: model.GetStructConfigTemplateTypeEnum().BUILT_IN,
    TemplateName: "VPC",
    TemplateId: "",
    LogStreamId: "b4d56d47-b4c4-453e-9047-xxxxxxxxxxxx",
    LogGroupId: "17f23e52-a23d-46e0-8bc5-xxxxxxxxxxxx",
}
response, err := client.UpdateStructConfig(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.8.3 Deleting a Structuring Rule

### Function

This API is used to delete a structuring rule of a log stream.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/{project\_id}/lts/struct/template

**Table 6-385** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-386** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-387** Request body parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Structuring rule ID. No default value. Minimum: <b>106</b> Maximum: <b>106</b>

## Response Parameters

Status code: 200

**Table 6-388** Response body parameters

Parameter	Type	Description
error_code	String	SVCSTG.ALS.200200
error_msg	String	delete struct config successfully

**Status code: 400**

**Table 6-389** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>SVCSTG.ALS.200201</b></li> <li>• <b>SVCSTG.ALS.200203</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>structConfigId is error</b></li> <li>• <b>delete redis failed.</b></li> </ul>

**Status code: 401**

**Table 6-390** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 403**

**Table 6-391** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-392** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0202</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Failed to query lts struct log</b></li> </ul>

## Example Requests

Deleting the structuring rule of the current ID

```
DELETE https://{endpoint}/v2/{project_id}/lts/struct/template
/v2/{project_id}/lts/struct/template
{
  "id": "2a473356cca5487f8373be891bffc1cf_8a75b77d-7d72-4d7e-8c50-
a24562cf8b0b_fd5e1a7c-7412-475d-a013-8891d539574e"
}
```

## Example Responses

**Status code: 200**

The structuring rule is deleted.

```
{
  "id": "xxxxxx"
}
```

**Status code: 400**

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode" : "LTS.0612",
  "errorMessage" : "timee fieldType is error"
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0414",
  "error_msg" : "Invalid token"
}
```

**Status code: 403**

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Invalid projectId"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0010",
  "error_msg" : "Internal Server Error"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Deleting the structuring rule of the current ID

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class DeleteStructTemplateSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
    }
}
```

```
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
DeleteStructTemplateRequest request = new DeleteStructTemplateRequest();
try {
    DeleteStructTemplateResponse response = client.deleteStructTemplate(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Deleting the structuring rule of the current ID

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteStructTemplateRequest()
        response = client.delete_struct_template(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Deleting the structuring rule of the current ID

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteStructTemplateRequest{}
    response, err := client.DeleteStructTemplate(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The structuring rule is deleted.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.

Status Code	Description
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.8.4 Querying a Structuring Rule

### Function

This API is used to query the structuring rule of a specified log stream.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/lts/struct/template

**Table 6-393** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>



**Table 6-394** Query Parameters

Parameter	Mandatory	Type	Description
logGroupId	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
logStreamId	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-395** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-396** Response body parameters

Parameter	Type	Description
demoFields	Array of <a href="#">StructFieldInfoReturn</a> objects	Structured field.
tagFields	Array of <a href="#">tag_fields_info</a> objects	Keyword details.
demoLog	String	Sample log event.
demoLabel	String	Attributes of the sample log event.
id	String	Structuring rule ID.
logGroupId	String	Log group ID.
rule	<a href="#">ShowStructTemplateRule</a> object	Structuring method.
cluster_info	<a href="#">ShowStructTemplateclusterInfo</a> object	Kafka information.
logStreamId	String	Log stream ID.
projectId	String	Project ID.
templateName	String	Template name.
regex	String	Regular expression.

**Table 6-397** StructFieldInfoReturn

Parameter	Type	Description
fieldName	String	Field name.
type	String	Field data type.
content	String	Field content.
isAnalysis	Boolean	Whether parsing is enabled.
index	Integer	Field sequence number.

**Table 6-398** tag\_fields\_info

Parameter	Type	Description
fieldName	String	Metric

Parameter	Type	Description
type	String	Type
content	String	Content
isAnalysis	Boolean	Whether parsing is enabled.
index	Integer	Field sequence number.

**Table 6-399** ShowStructTemplateRule

Parameter	Type	Description
param	String	Structuring parameter.
type	String	Structuring type.

**Table 6-400** ShowStructTemplateclusterInfo

Parameter	Type	Description
cluster_name	String	Kafka cluster name.
kafka_bootstrap_servers	String	Kafka cluster server address.
kafka_ssl_enable	Boolean	Whether SSL encrypted authentication is enabled for Kafka.

**Status code: 400**

**Table 6-401** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>SVCSTG.ALS.200201</b></li> <li>• <b>LTS.0208</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Query Param is error</b></li> <li>• <b>The log stream does not existed</b></li> </ul>

**Status code: 401**

**Table 6-402** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 403**

**Table 6-403** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-404** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0202</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Failed to query lts struct log</b></li> </ul>

## Example Requests

Query the structuring rule of a specified log stream. The request parameter is same as the path parameter. No request example is provided.

## Example Responses

### Status code: 200

Details of the structuring rule are returned.

```
{
  "demoFields": [ {
    "content": "100.19.10.178",
    "fieldName": "authority",
    "index": 0,
    "isAnalysis": true,
    "type": "string"
  }, {
    "content": "0",
    "fieldName": "bytes_received",
    "index": 0,
    "isAnalysis": true,
    "type": "string"
  }, {
    "content": "1127",
    "fieldName": "bytes_sent",
    "index": 0,
    "isAnalysis": true,
    "type": "string"
  } ]
}
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode": "SVCSTG.ALS.200201",
  "errorMessage": "Query Param is error."
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code": "LTS.0414",
  "error_msg": "Invalid token"
}
```

### Status code: 403

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code": "LTS.0001",
  "error_msg": "Invalid projectId"
}
```

### Status code: 500

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0102",
  "error_msg": "Query empty."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ShowStructTemplateSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowStructTemplateRequest request = new ShowStructTemplateRequest();
        try {
            ShowStructTemplateResponse response = client.showStructTemplate(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

### Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdklts.v2 import *

if __name__ == "__main__":
```

```
# The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
# In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowStructTemplateRequest()
    response = client.show_struct_template(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowStructTemplateRequest{}
    response, err := client.ShowStructTemplate(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Details of the structuring rule are returned.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.8.5 Querying the Brief List of Structuring Templates

### Function

This API is used to query the brief list of structuring templates.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v3/{project\_id}/lts/struct/customtemplate/list



**Table 6-405** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-406** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: **200**

**Table 6-407** Response body parameters

Parameter	Type	Description
results	Array of <a href="#">BriefStructTemplateModel</a> objects	Brief list of structuring templates.

**Table 6-408** BriefStructTemplateModel

Parameter	Type	Description
create_time	Long	Template creation/update time. Minimum: <b>0</b> Maximum: <b>2000000000000000</b>
id	String	Template ID. Minimum: <b>36</b> Maximum: <b>36</b>
template_name	String	Template name. Minimum: <b>1</b> Maximum: <b>64</b>
template_type	String	Structuring type. Currently, regular expression, JSON, delimiters, and Nginx are supported. Enumeration values: <ul style="list-style-type: none"> <li>• <b>regex</b></li> <li>• <b>json</b></li> <li>• <b>split</b></li> <li>• <b>nginx</b></li> </ul>
project_id	String	Project ID. For details about how to obtain a project ID, see Obtaining the Account ID, Project ID, Log Group ID, and Log Stream ID. Minimum: <b>32</b> Maximum: <b>32</b>

**Status code: 500**

**Table 6-409** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Internal Server Error</b></li> </ul>

## Example Requests

Obtaining the Brief List of Structuring Templates of the Current Tenant

```
GET https://{endpoint}/v3/{project_id}/lts/struct/customtemplate/list  
  
/v3/{project_id}/lts/struct/customtemplate/list
```

## Example Responses

### Status code: 200

The request is successful.

```
{  
  "results": [ {  
    "create_time": 1632897983441,  
    "id": "47629e46-287d-478c-8888-xxxxxxxxxxxx",  
    "template_name": "jsonTemplate",  
    "template_type": "json",  
    "project_id": "2a473356cca5487f8373be89xxxxxxxx"  
  } ]  
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{  
  "error_code": "LTS.2017",  
  "error_msg": "Find struct template failed."  
}
```

## Status Codes

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.8.6 Querying a Structuring Template

### Function

This API is used to query a structuring template.

Note:

A user can call this API for up to 50 times per second.

## Calling Method

For details, see [Calling APIs](#).

## URI

GET /v3/{project\_id}/lts/struct/customtemplate

**Table 6-410** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-411** Query Parameters

Parameter	Mandatory	Type	Description
id	No	String	ID of the template to be queried. This parameter is optional. If this parameter is not specified, all custom structuring templates used in the project are returned. Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-412** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-413** Response body parameters

Parameter	Type	Description
results	Array of <a href="#">StructTemplateModel</a> objects	Array of queried customized structuring templates.

**Table 6-414** StructTemplateModel

Parameter	Type	Description
project_id	String	Project ID. Minimum: <b>32</b> Maximum: <b>32</b>
template_name	String	Template name. Minimum: <b>1</b> Maximum: <b>64</b>
template_type	String	Template type. The options are regular expression, JSON, delimiter, and Nginx. Enumeration values: <ul style="list-style-type: none"> <li>• <b>regex</b></li> <li>• <b>json</b></li> <li>• <b>split</b></li> <li>• <b>nginx</b></li> </ul>
demo_log	String	Sample log event. Minimum: <b>1</b> Maximum: <b>5000</b>

Parameter	Type	Description
demo_fields	Array of <b>DemoField</b> objects	Example field array.
tag_fields	Array of <b>TagFieldNew</b> objects	Tag field array.
rule	<b>TemplateRule</b> object	Structuring rule object.
demo_label	String	Example log tag. Minimum: <b>0</b> Maximum: <b>5000</b>
create_time	Long	Creation time. Minimum: <b>0</b> Maximum: <b>2000000000000000</b>
id	String	Template ID. Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-415** DemoField

Parameter	Type	Description
field_name	String	Field name. Minimum: <b>1</b> Maximum: <b>64</b>
content	String	Field example. Minimum: <b>1</b> Maximum: <b>5000</b>
type	String	Field data type. Value: <b>string</b> , <b>long</b> , or <b>float</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>string</b></li> <li>• <b>long</b></li> <li>• <b>float</b></li> </ul>
is_analysis	Boolean	Whether to enable quick analysis.

Parameter	Type	Description
index	Integer	Field number in manual regular expression and delimiter modes. Minimum: <b>0</b> Maximum: <b>200</b>
relation	String	Describes the hierarchical relationship between fields in a multi-level JSON file. Minimum: <b>0</b> Maximum: <b>1000</b>
user_defined_name	String	Custom field alias in JSON and Nginx modes. Minimum: <b>1</b> Maximum: <b>64</b>

**Table 6-416** TagFieldNew

Parameter	Type	Description
field_name	String	Field name. Minimum: <b>1</b> Maximum: <b>64</b>
content	String	Field example. Minimum: <b>0</b> Maximum: <b>5000</b>
type	String	Field data type. Value: <b>string, long, or float</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>string</b></li> <li>• <b>long</b></li> <li>• <b>float</b></li> </ul>
is_analysis	Boolean	Whether to enable quick analysis.
index	Integer	Sequence number (starting from 0). Minimum: <b>0</b> Maximum: <b>200</b>

**Table 6-417** TemplateRule

Parameter	Type	Description
type	String	Structuring type. Currently, regular expression, JSON, delimiters, and Nginx are supported. Enumeration values: <ul style="list-style-type: none"><li>• <b>custom_regex</b></li><li>• <b>json</b></li><li>• <b>split</b></li><li>• <b>nginx</b></li></ul>



Parameter	Type	Description
param	String	<p>Specific structuring rule. Each structuring type has a unique structure:</p> <p>A manual regular expression is a JSON string that contains the <b>keyObject</b> and <b>regex_rules</b> objects. <b>keyObject</b> contains key-value pairs, where a key indicates the index of an element in the <b>demo_fields</b> array, and a value indicates <b>field_name</b>. <b>regex_rules</b> is a regular expression. Example:</p> <pre>{   "keyObject": {     "1": "date",     "2": "num"   },   "regex_rules": {     "1": "(?&lt;date&gt;[^\"]+)(?:[^\"]* )?{8}(?&lt;num&gt;[\\d+)"   } }</pre> <p>In JSON mode, <b>param</b> is a JSON string that contains the <b>keyObject</b> and <b>layers</b> objects. <b>keyObject</b> contains key-value pairs, where a key indicates the <b>field_name</b> of an element in the <b>demo_fields</b> array, and a value indicates <b>user_defined_name</b>. <b>layers</b> indicates the maximum number of parsing layers. Its maximum value is 4. Example:</p> <pre>{   "keyObject": {     "metadata.dimension": "dimension",     "metadata.value": "value",     "metadata.unit": "unit",     "collectionTime": "time",     "layers": 3   } }</pre> <p>The delimiter mode uses a JSON string that contains the <b>keyObject</b> and <b>tokenizer</b> objects. <b>keyObject</b> contains key-value pairs, where a key indicates the index of an element in the <b>demo_fields</b> array, and a value indicates <b>field_name</b>. <b>tokenizer</b> indicates delimiters. Example:</p> <pre>{   "keyObject": {     "0": "field1",     "1": "field2",     "2": "field3",     "3": "field4",     "4": "field5",     "5": "field6",     "6": "field7",     "7": "field8",     "8": "field9"   },   "tokenizer": {     "1": " "   } }</pre> <p>The Nginx mode uses a JSON string that contains the <b>keyObject</b>, <b>regex</b>, <b>field_names</b>, and <b>log_format</b> objects. <b>keyObject</b> contains key-value pairs, where a key indicates the <b>field_name</b> of an element in the <b>demo_fields</b> array, and a value indicates <b>user_defined_name</b>. <b>regex</b> is a regular expression, where the <b>field_names</b> object is the combination of <b>field_name</b> of each element in the</p>



```

    "index" : 0,
    "is_analysis" : true,
    "type" : "string"
  }, {
    "content" : "this",
    "field_name" : "field2",
    "index" : 1,
    "is_analysis" : true,
    "type" : "string"
  }, {
    "content" : "log",
    "field_name" : "field3",
    "index" : 2,
    "is_analysis" : false,
    "type" : "string"
  }, {
    "content" : "is",
    "field_name" : "field4",
    "index" : 3,
    "is_analysis" : false,
    "type" : "string"
  }, {
    "content" : "Error",
    "field_name" : "field5",
    "index" : 4,
    "is_analysis" : false,
    "type" : "string"
  }, {
    "content" : "NO",
    "field_name" : "field6",
    "index" : 5,
    "is_analysis" : false,
    "type" : "string"
  }, {
    "content" : "13 testing.",
    "field_name" : "field7",
    "index" : 6,
    "is_analysis" : false,
    "type" : "string"
  }, {
    "content" : "286",
    "field_name" : "field8",
    "index" : 7,
    "is_analysis" : false,
    "type" : "long"
  } ],
  "demo_log" : "2022-01-03/14:52:28 this log is Error NO 13 testing 286.",
  "id" : "43a8cc7b-b632-4c36-a65d-8150e98219f1",
  "project_id" : "2a473356cca5487f8373be89xxxxxxxx",
  "rule" : {
    "param" : {"keyObject\":
      {"0\":"field1\","1\":"field2\","2\":"field3\","3\":"field4\","4\":"field5\","5\":"field6\","6\":"field7\","7\":"field8\"},\"tokenizer\":" \" \"},
      "type" : "split"
    },
    "demo_label" : "{}",
    "tag_fields" : [ {
      "content" : "172.16.10.69",
      "field_name" : "hostIP",
      "index" : 0,
      "is_analysis" : true,
      "type" : "string"
    } ],
    "template_name" : "testSplit13",
    "template_type" : "split"
  } ]
}

```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2017",
  "error_msg" : "Find struct template failed."
}
```

## Status Codes

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.9 Container Log Ingestion from AOM to LTS

## 6.9.1 Creating an Ingestion Rule

### Function

This API is used to create a rule of ingesting container logs from AOM to LTS.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/lts/aom-mapping

**Table 6-419** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-420** Query Parameters

Parameter	Mandatory	Type	Description
isBatch	Yes	Boolean	Whether automatic mapping is used. If you set this parameter to true, you do not need to set the container name and log stream parameters.

## Request Parameters

**Table 6-421** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-422** Request body parameters

Parameter	Mandatory	Type	Description
rule_name	Yes	String	Ingestion rule name. Minimum: <b>1</b> Maximum: <b>100</b>
rule_info	Yes	<a href="#">AomMappingRuleInfo</a> object	Rule details.

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see section "10.3 Obtaining the Account ID, Project Resource Set ID, Log Group ID, and Log Stream ID." Minimum: <b>32</b> Maximum: <b>32</b>
rule_id	No	String	Ingestion rule ID.

**Table 6-423** AomMappingRuleInfo

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	Cluster ID.
cluster_name	Yes	String	Cluster name.
deployments_prefix	No	String	Log stream prefix. If <b>isBatch</b> is <b>true</b> and this parameter is set, the log stream name consists of this parameter and the parameter <b>deployments</b> . The length of the combined log stream name cannot exceed 64 characters.
deployments	Yes	Array of strings	Deployment. <b>ALL_DEPLOYMENTS</b> indicates all Deployments. <b>NOTE</b> During automatic mapping, all deployments need to be listed.
namespace	Yes	String	Namespace.
files	Yes	Array of <b>CreateAomMappingfilesInfo</b> objects	Log. <b>ALL_FILES</b> indicates all logs.
container_name	No	String	Container name.

**Table 6-424** CreateAomMappingfilesInfo

Parameter	Mandatory	Type	Description
file_name	Yes	String	Path name. Matching rule: $\wedge/[A-Za-z0-9._/-]+/stdout.log/$ Up to two asterisks (*) are allowed.
log_stream_info	Yes	CreateAomMappingLogStreamInfo object	Log stream details.

**Table 6-425** CreateAomMappingLogStreamInfo

Parameter	Mandatory	Type	Description
target_log_group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
target_log_group_name	Yes	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
target_log_stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
target_log_stream_name	Yes	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

## Response Parameters

Status code: 201

**Table 6-426** Response body parameters

Parameter	Type	Description
[items]	Array of CreateAomMappingRuleResp objects	

**Table 6-427** CreateAomMappingRuleResp

Parameter	Type	Description
project_id	String	Project ID.
rule_name	String	Ingestion rule name.
rule_id	String	Ingestion rule ID.
rule_info	<a href="#">AomMappingRuleInfoRespBody</a> object	Ingestion rule details.

**Table 6-428** AomMappingRuleInfoRespBody

Parameter	Type	Description
cluster_id	String	Cluster ID.
cluster_name	String	Cluster name.
deployments_prefix	String	Log stream prefix.
deployments	Array of strings	Workload.
namespace	String	Namespace
container_name	String	Container name
files	Array of <a href="#">AomMappingfileInfos</a> objects	Ingestion rule details.

**Table 6-429** AomMappingfilesInfos

Parameter	Type	Description
file_name	String	Path name.
log_stream_info	<a href="#">AomMappingLogStreamInfos</a> object	Ingestion rule details.

**Table 6-430** AomMappingLogStreamInfos

Parameter	Type	Description
target_log_group_id	String	Log group ID.



Parameter	Type	Description
target_log_group_name	String	Target log group name.
target_log_stream_id	String	Log stream ID.
target_log_stream_name	String	Target log stream name.

**Status code: 400**

**Table 6-431** Response body parameters

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• LTS.0742</li> <li>• LTS.0743</li> <li>• LTS.0014</li> <li>• LTS.0740</li> <li>• LTS.0744</li> <li>• LTS.0746</li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• AOM mapping rule log group id does not exist</li> <li>• Operation DB failed</li> <li>• AOM mapping rule name already exists</li> <li>• AOM mapping rule param validate error</li> <li>• AOM mapping rule log stream id does not exist</li> <li>• AOM mapping rule log stream name already exist in another log group</li> </ul>

**Status code: 401**

**Table 6-432** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 403**

**Table 6-433** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-434** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Creating an ingestion rule

```
POST https://{endpoint}/v2/{project_id}/lts/aom-mapping
```

```
{
  "rule_name": "abcde",
  "project_id": "2a473356cca5487f8373be891bffc1cf",
  "rule_info": {
    "cluster_id": "4fae3587-0202-11eb-9ba9-0255ac100b02",
    "cluster_name": "testdiskrate",
    "deployments_prefix": "deployments_prefix",
    "deployments": [ "__ALL_DEPLOYMENTS__" ],
    "namespace": "default",
    "container_name": "container-0",
    "files": [ {
      "file_name": "__ALL_FILES__",
      "log_stream_info": {
        "target_log_group_id": "8c9dcda6-d048-43a7-989b-c76c34b0ac85",
        "target_log_group_name": "lts-group-wb28",
        "target_log_stream_id": "2c228bd1-cbf1-41fb-b563-0ca2769202b2",
        "target_log_stream_name": "mysql"
      }
    }
  ]
}
```

## Example Responses

### Status code: 201

The ingestion rule is created.

```
[ {
  "project_id": "",
  "rule_id": "",
  "rule_info": {
    "cluster_id": "",
    "cluster_name": "",
    "container_name": "",
    "deployments_prefix": "deployments_prefix",
    "deployments": [ "" ],
    "files": [ {
      "file_name": "",
      "log_stream_info": {
        "target_log_group_id": "",
        "target_log_group_name": "",
        "target_log_stream_id": "",
        "target_log_stream_name": ""
      }
    }
  ],
  "namespace": ""
},
"rule_name": ""
]
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode": "LTS.0014",
  "errorMessage": "Operation DB failed"
}
```

### Status code: 401

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code": "LTS.0414",
  "error_msg": "Invalid token"
}
```

**Status code: 403**

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "parse_token_failed"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0102",
  "error_msg" : "ServiceUnavailable."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating an ingestion rule

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateAomMappingRulesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateAomMappingRulesRequest request = new CreateAomMappingRulesRequest();
```

```
AomMappingRequestInfo body = new AomMappingRequestInfo();
AomMappingLogStreamInfo logStreamInfoFiles = new AomMappingLogStreamInfo();
logStreamInfoFiles.withTargetLogGroupId("8c9dcda6-d048-43a7-989b-c76c34b0ac85")
    .withTargetLogGroupName("lts-group-wb28")
    .withTargetLogStreamId("2c228bd1-cbf1-41fb-b563-0ca2769202b2")
    .withTargetLogStreamName("mysql");
List<AomMappingfilesInfo> listRuleInfoFiles = new ArrayList<>();
listRuleInfoFiles.add(
    new AomMappingfilesInfo()
        .withFileName("_ALL_FILES_")
        .withLogStreamInfo(logStreamInfoFiles)
);
List<String> listRuleInfoDeployments = new ArrayList<>();
listRuleInfoDeployments.add("_ALL_DEPLOYMENTS_");
AomMappingRuleInfo ruleInfobody = new AomMappingRuleInfo();
ruleInfobody.withClusterId("4fae3587-0202-11eb-9ba9-0255ac100b02")
    .withClusterName("testdiskrate")
    .withDeploymentsPrefix("deployments_prefix")
    .withDeployments(listRuleInfoDeployments)
    .withNamespace("default")
    .withContainerName("container-0")
    .withFiles(listRuleInfoFiles);
body.withRuleInfo(ruleInfobody);
body.withRuleName("abcde");
body.withProjectId("2a473356cca5487f8373be891bffc1cf");
request.withBody(body);
try {
    CreateAomMappingRulesResponse response = client.createAomMappingRules(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Creating an ingestion rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
```

```
.with_region(LtsRegion.value_of("<YOUR REGION>")) \  
.build()  
  
try:  
    request = CreateAomMappingRulesRequest()  
    logStreamInfoFiles = AomMappingLogStreamInfo(  
        target_log_group_id="8c9dcda6-d048-43a7-989b-c76c34b0ac85",  
        target_log_group_name="lts-group-wb28",  
        target_log_stream_id="2c228bd1-cbf1-41fb-b563-0ca2769202b2",  
        target_log_stream_name="mysql"  
    )  
    listFilesRuleInfo = [  
        AomMappingfilesInfo(  
            file_name="__ALL_FILES__",  
            log_stream_info=logStreamInfoFiles  
        )  
    ]  
    listDeploymentsRuleInfo = [  
        "__ALL_DEPLOYMENTS__"  
    ]  
    ruleInfobody = AomMappingRuleInfo(  
        cluster_id="4fae3587-0202-11eb-9ba9-0255ac100b02",  
        cluster_name="testdiskrate",  
        deployments_prefix="deployments_prefix",  
        deployments=listDeploymentsRuleInfo,  
        namespace="default",  
        container_name="container-0",  
        files=listFilesRuleInfo  
    )  
    request.body = AomMappingRequestInfo(  
        rule_info=ruleInfobody,  
        rule_name="abcde",  
        project_id="2a473356cca5487f8373be891bffc1cf"  
    )  
    response = client.create_aom_mapping_rules(request)  
    print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

## Go

### Creating an ingestion rule

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).
```

```

WithProjectId(projectId).
Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateAomMappingRulesRequest{}
logStreamInfoFiles := &model.AomMappingLogStreamInfo{
    TargetLogGroupId: "8c9dcda6-d048-43a7-989b-c76c34b0ac85",
    TargetLogGroupName: "lts-group-wb28",
    TargetLogStreamId: "2c228bd1-cbf1-41fb-b563-0ca2769202b2",
    TargetLogStreamName: "mysql",
}
var listFilesRuleInfo = []model.AomMappingfilesInfo{
    {
        FileName: "__ALL_FILES__",
        LogStreamInfo: logStreamInfoFiles,
    },
}
var listDeploymentsRuleInfo = List<String>{
    "__ALL_DEPLOYMENTS__",
}
deploymentsPrefixRuleInfo:= "deployments_prefix"
containerNameRuleInfo:= "container-0"
ruleInfobody := &model.AomMappingRuleInfo{
    ClusterId: "4fae3587-0202-11eb-9ba9-0255ac100b02",
    ClusterName: "testdiskrate",
    DeploymentsPrefix: &deploymentsPrefixRuleInfo,
    Deployments: listDeploymentsRuleInfo,
    Namespace: "default",
    ContainerName: &containerNameRuleInfo,
    Files: listFilesRuleInfo,
}
request.Body = &model.AomMappingRequestInfo{
    RuleInfo: ruleInfobody,
    RuleName: "abcde",
    ProjectId: "2a473356cca5487f8373be891bffc1cf",
}
response, err := client.CreateAomMappingRules(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The ingestion rule is created.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.

Status Code	Description
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.9.2 Modifying an Ingestion Rule

### Function

This API is used to modify an ingestion rule.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/{project\_id}/lts/aom-mapping

**Table 6-435** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>



## Request Parameters

**Table 6-436** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-437** Request body parameters

Parameter	Mandatory	Type	Description
rule_id	Yes	String	Ingestion rule ID. Minimum: <b>36</b> Maximum: <b>36</b>
project_id	Yes	String	Project ID. Minimum: <b>32</b> Maximum: <b>32</b>
rule_name	Yes	String	Ingestion rule name. Minimum: <b>1</b> Maximum: <b>100</b>
rule_info	Yes	<a href="#">UpdateAomMappingRuleInfo</a> object	Ingestion rule details.

**Table 6-438** UpdateAomMappingRuleInfo

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	Cluster ID.
cluster_name	Yes	String	Cluster name.

Parameter	Mandatory	Type	Description
deployments	Yes	Array of strings	Deployment. <b>ALL_DEPLOYMENTS</b> indicates all Deployments. During automatic mapping, all Deployments need to be listed.
namespace	Yes	String	Namespace.
files	Yes	Array of <a href="#">AomMappingfilesInfo</a> objects	Log details. <b>ALL_FILES</b> indicates all logs.
container_name	No	String	Container name.
deployments_prefix	No	String	Available custom log stream prefix.

**Table 6-439** AomMappingfilesInfo

Parameter	Mandatory	Type	Description
file_name	Yes	String	Path name. The matching rule is as follows: <code>^[A-Za-z0-9.*_/-]+ stdout.log </code> (A maximum of two asterisks (**)) are supported.)
log_stream_info	Yes	<a href="#">UpdateAomMappingLogStreamInfo</a> object	Log stream information.

**Table 6-440** UpdateAomMappingLogStreamInfo

Parameter	Mandatory	Type	Description
target_log_group_id	Yes	String	Log group ID. The ID must be valid. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
target_log_group_name	Yes	String	Log group name. The log group name and ID cannot be empty at the same time. Minimum: <b>1</b> Maximum: <b>64</b>
target_log_stream_id	Yes	String	Log stream ID. The ID must be valid. Minimum: <b>36</b> Maximum: <b>36</b>
target_log_stream_name	Yes	String	Log stream name. The log stream name and ID cannot be empty at the same time. Minimum: <b>1</b> Maximum: <b>64</b>

## Response Parameters

Status code: 200

**Table 6-441** Response body parameters

Parameter	Type	Description
project_id	String	Project ID.
rule_name	String	Ingestion rule name.
rule_id	String	Ingestion rule ID.
rule_info	<b>UpdateAomMappingRuleInfoRespBody</b> object	Ingestion rule details.

**Table 6-442** UpdateAomMappingRuleInfoRespBody

Parameter	Type	Description
cluster_id	String	Cluster ID.
cluster_name	String	Cluster name.

Parameter	Type	Description
deployments	Array of strings	Deployment. <b>ALL_DEPLOYMENTS</b> indicates all Deployments. <b>NOTE</b> During automatic mapping, all Deployments need to be listed.
namespace	String	Namespace.
files	Array of <b>UpdateAomMappingfilesInfos</b> objects	Log details. <b>ALL_FILES</b> indicates all logs.
container_name	String	Container name.
deployments_prefix	String	Available custom log stream prefix.

**Table 6-443** UpdateAomMappingfilesInfos

Parameter	Type	Description
file_name	String	Path name. Matching rule: <code>^[A-Za-z0-9._/-]+/stdout.log/</code> Up to two asterisks (*) are allowed.
log_stream_info	<b>UpdateAomMappingLogStreamInfos</b> object	Log stream details.

**Table 6-444** UpdateAomMappingLogStreamInfos

Parameter	Type	Description
target_log_group_id	String	Log group ID. The ID must be valid. No default value. Minimum: <b>36</b> Maximum: <b>36</b>
target_log_group_name	String	Log group name. The log group name and ID cannot be empty at the same time. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Type	Description
target_log_stream_id	String	Log stream ID. The ID must be valid. No default value. Minimum: <b>36</b> Maximum: <b>36</b>
target_log_stream_name	String	Log stream name. The log stream name and ID cannot be empty at the same time. Minimum: <b>1</b> Maximum: <b>64</b>

**Status code: 400**

**Table 6-445** Response body parameters

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0742</b></li> <li>• <b>LTS.0743</b></li> <li>• <b>LTS.0014</b></li> <li>• <b>LTS.0740</b></li> <li>• <b>LTS.0744</b></li> <li>• <b>LTS.0746</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>AOM mapping rule log group id does not exist</b></li> <li>• <b>Operation DB failed</b></li> <li>• <b>AOM mapping rule name already exists</b></li> <li>• <b>AOM mapping rule param validate error</b></li> <li>• <b>AOM mapping rule log stream id does not exist</b></li> <li>• <b>AOM mapping rule log stream name already exist in another log group</b></li> </ul>

**Status code: 401**

**Table 6-446** Response body parameters

Parameter	Type	Description
message	<a href="#">Message401</a> object	Response message.

**Table 6-447** Message401

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0001</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>project verify error</b></li> </ul>

**Status code: 403**

**Table 6-448** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li><b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-449** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li><b>LTS.0403</b></li> </ul>

Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

### Modifying an ingestion rule

PUT https://{endpoint}/v2/{project\_id}/lts/aom-mapping

```
{
  "rule_id": "",
  "rule_name": "abcde",
  "project_id": "2a473356cca5487f8373be891bffc1cf",
  "rule_info": {
    "cluster_id": "4fae3587-0202-11eb-9ba9-0255ac100b02",
    "cluster_name": "testdiskrate",
    "deployments": [ "__ALL_DEPLOYMENTS__" ],
    "namespace": "default",
    "container_name": "container-0",
    "files": [ {
      "file_name": "__ALL_FILES__",
      "log_stream_info": {
        "target_log_group_id": "8c9dcda6-d048-43a7-989b-c76c34b0ac85",
        "target_log_group_name": "lts-group-wb28",
        "target_log_stream_id": "2c228bd1-cbf1-41fb-b563-0ca2769202b2",
        "target_log_stream_name": "mysql"
      }
    }
  ]
}
```

## Example Responses

### Status code: 200

The ingestion rule is modified.

```
{
  "rule_id": "",
  "project_id": "",
  "rule_name": "",
  "rule_info": {
    "cluster_name": "",
    "cluster_id": "",
    "deployments": [ ],
    "container_name": "",
    "namespace": "",
    "files": [ {
      "file_name": "",
      "log_stream_info": {
        "target_log_stream_name": "",
        "target_log_group_name": "",
        "target_log_stream_id": "",
        "target_log_group_id": ""
      }
    }
  ]
}
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode": "LTS.0014",
  "errorMessage": "Operation DB failed"
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code": "LTS.0414",
  "error_msg": "Invalid token"
}
```

**Status code: 403**

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code": "LTS.0003",
  "error_msg": "parse_token_failed"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0102",
  "error_msg": "ServiceUnavailable."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Modifying an ingestion rule

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateAomMappingRulesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
```



```
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();

UpdateAomMappingRulesRequest request = new UpdateAomMappingRulesRequest();
UpdateAomMappingRequest body = new UpdateAomMappingRequest();
AomMappingLogStreamInfo logStreamInfoFiles = new AomMappingLogStreamInfo();
logStreamInfoFiles.withTargetLogGroupId("8c9dcda6-d048-43a7-989b-c76c34b0ac85")
    .withTargetLogGroupName("lts-group-wb28")
    .withTargetLogStreamId("2c228bd1-cbf1-41fb-b563-0ca2769202b2")
    .withTargetLogStreamName("mysql");
List<AomMappingfilesInfo> listRuleInfoFiles = new ArrayList<>();
listRuleInfoFiles.add(
    new AomMappingfilesInfo()
        .withFileName("_ALL_FILES_")
        .withLogStreamInfo(logStreamInfoFiles)
);
List<String> listRuleInfoDeployments = new ArrayList<>();
listRuleInfoDeployments.add("_ALL_DEPLOYMENTS_");
AomMappingRuleInfo ruleInfobody = new AomMappingRuleInfo();
ruleInfobody.withClusterId("4fae3587-0202-11eb-9ba9-0255ac100b02")
    .withClusterName("testdiskrate")
    .withDeployments(listRuleInfoDeployments)
    .withNamespace("default")
    .withContainerName("container-0")
    .withFiles(listRuleInfoFiles);
body.withRuleInfo(ruleInfobody);
body.withRuleName("abcde");
body.withProjectId("2a473356cca5487f8373be891bffc1cf");
body.withRuleId("");
request.withBody(body);
try {
    UpdateAomMappingRulesResponse response = client.updateAomMappingRules(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Modifying an ingestion rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
```

```
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAomMappingRulesRequest()
        logStreamInfoFiles = AomMappingLogStreamInfo(
            target_log_group_id="8c9dcda6-d048-43a7-989b-c76c34b0ac85",
            target_log_group_name="lts-group-wb28",
            target_log_stream_id="2c228bd1-cbf1-41fb-b563-0ca2769202b2",
            target_log_stream_name="mysql"
        )
        listFilesRuleInfo = [
            AomMappingfilesInfo(
                file_name="__ALL_FILES__",
                log_stream_info=logStreamInfoFiles
            )
        ]
        listDeploymentsRuleInfo = [
            "__ALL_DEPLOYMENTS__"
        ]
        ruleInfobody = AomMappingRuleInfo(
            cluster_id="4fae3587-0202-11eb-9ba9-0255ac100b02",
            cluster_name="testdiskrate",
            deployments=listDeploymentsRuleInfo,
            namespace="default",
            container_name="container-0",
            files=listFilesRuleInfo
        )
        request.body = UpdateAomMappingRequest(
            rule_info=ruleInfobody,
            rule_name="abcde",
            project_id="2a473356cca5487f8373be891bffc1cf",
            rule_id=""
        )
        response = client.update_aom_mapping_rules(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Modifying an ingestion rule

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateAomMappingRulesRequest{
        logStreamInfoFiles := &model.AomMappingLogStreamInfo{
            TargetLogGroupId: "8c9dcda6-d048-43a7-989b-c76c34b0ac85",
            TargetLogGroupName: "lts-group-wb28",
            TargetLogStreamId: "2c228bd1-cbf1-41fb-b563-0ca2769202b2",
            TargetLogStreamName: "mysql",
        }
    }
    var listFilesRuleInfo = []model.AomMappingfilesInfo{
        {
            FileName: "__ALL_FILES__",
            LogStreamInfo: logStreamInfoFiles,
        },
    }
    var listDeploymentsRuleInfo = []string{
        "__ALL_DEPLOYMENTS__",
    }
    containerNameRuleInfo := "container-0"
    ruleInfobody := &model.AomMappingRuleInfo{
        ClusterId: "4fae3587-0202-11eb-9ba9-0255ac100b02",
        ClusterName: "testdiskrate",
        Deployments: listDeploymentsRuleInfo,
        Namespace: "default",
        ContainerName: &containerNameRuleInfo,
        Files: listFilesRuleInfo,
    }
    request.Body = &model.UpdateAomMappingRequest{
        RuleInfo: ruleInfobody,
        RuleName: "abcde",
        ProjectId: "2a473356cca5487f8373be891bffc1cf",
        RuleId: "",
    }
    response, err := client.UpdateAomMappingRules(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The ingestion rule is modified.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.9.3 Deleting an Ingestion Rule

### Function

This API is used to delete a rule of ingesting container logs from AOM to LTS.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/{project\_id}/lts/aom-mapping

**Table 6-450** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-451** Query Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Ingestion rule ID. Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-452** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: **200**

**Table 6-453** Response body parameters

Parameter	Type	Description
[items]	Array of strings	

**Status code: 400**

**Table 6-454** Response body parameters

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0744</b></li> <li>• <b>LTS.0014</b></li> <li>• <b>LTS.0745</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>AOM mapping rule param validate error</b></li> <li>• <b>Operation DB failed</b></li> <li>• <b>AOM mapping rule id is invalid</b></li> </ul>

**Status code: 401**

**Table 6-455** Response body parameters

Parameter	Type	Description
message	<a href="#">Message401</a> object	Response message.

**Table 6-456** Message401

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0001</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>project verify error</b></li> </ul>

**Status code: 403**

**Table 6-457** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-458** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Deleting an ingestion rule

```
DELETE /v2/{project_id}/lts/aom-mapping?id={id}
```

```
DELETE https://{endpoint}/v2/{project_id}/lts/aom-mapping?id=3e14a212-a633-411d-a8e1-dc4042b1471a
```

## Example Responses

**Status code: 400**

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode": "LTS.0014",
  "errorMessage": "Operation DB failed"
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0414",
  "error_msg" : "Invalid token"
}
```

**Status code: 403**

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "parse_token_failed"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0102",
  "error_msg" : "ServiceUnavailable."
}
```

**Status Codes**

Status Code	Description
200	The ingestion rule is deleted.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.

**Error Codes**

See [Error Codes](#).

**6.9.4 Querying All Ingestion Rules**

**Function**

This API is used to query all rules of ingesting container logs from AOM to LTS.



## Calling Method

For details, see [Calling APIs](#).

## URI

GET /v2/{project\_id}/lts/aom-mapping

**Table 6-459** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-460** Query Parameters

Parameter	Mandatory	Type	Description
log_group_name	No	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_stream_name	No	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

## Request Parameters

**Table 6-461** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-462** Response body parameters

Parameter	Type	Description
[items]	Array of <a href="#">CreateAomMappingRuleResp</a> objects	

**Table 6-463** CreateAomMappingRuleResp

Parameter	Type	Description
project_id	String	Project ID.
rule_name	String	Ingestion rule name.
rule_id	String	Ingestion rule ID.
rule_info	<a href="#">AomMappingRuleInfoRespBody</a> object	Ingestion rule details.

**Table 6-464** AomMappingRuleInfoRespBody

Parameter	Type	Description
cluster_id	String	Cluster ID.
cluster_name	String	Cluster name.
deployments_prefix	String	Log stream prefix.
deployments	Array of strings	Workload.
namespace	String	Namespace

Parameter	Type	Description
container_name	String	Container name
files	Array of <a href="#">AomMappingfilesInfos</a> objects	Ingestion rule details.

**Table 6-465** AomMappingfilesInfos

Parameter	Type	Description
file_name	String	Path name.
log_stream_info	<a href="#">AomMappingLogStreamInfos</a> object	Ingestion rule details.

**Table 6-466** AomMappingLogStreamInfos

Parameter	Type	Description
target_log_group_id	String	Log group ID.
target_log_group_name	String	Target log group name.
target_log_stream_id	String	Log stream ID.
target_log_stream_name	String	Target log stream name.

**Status code: 400**

**Table 6-467** Response body parameters

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0014</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Operation DB failed</b></li> </ul>

**Status code: 401**

**Table 6-468** Response body parameters

Parameter	Type	Description
message	<b>Message401</b> object	Response message.

**Table 6-469** Message401

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0001</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>project verify error</b></li> </ul>

**Status code: 403**

**Table 6-470** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-471** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>

Parameter	Type	Description
error_msg	String	Error message.

## Example Requests

None

## Example Responses

### Status code: 200

Details of all ingestion rules are returned.

```
[{
  "project_id": "",
  "rule_id": "",
  "rule_info": {
    "cluster_id": "",
    "cluster_name": "",
    "container_name": "",
    "deployments": [ "" ],
    "files": [ {
      "file_name": "",
      "log_stream_info": {
        "target_log_group_id": "",
        "target_log_group_name": "",
        "target_log_stream_id": "",
        "target_log_stream_name": ""
      }
    }
  ],
  "namespace": ""
},
{
  "rule_name": ""
}, {
  "project_id": "",
  "rule_id": "",
  "rule_info": {
    "cluster_id": "",
    "cluster_name": "",
    "container_name": "",
    "deployments": [ "" ],
    "files": [ {
      "file_name": "",
      "log_stream_info": {
        "target_log_group_id": "",
        "target_log_group_name": "",
        "target_log_stream_id": "",
        "target_log_stream_name": ""
      }
    }
  ],
  "namespace": ""
},
{
  "rule_name": ""
}
]
```

### Status code: 400

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode": "LTS.0014",
```

```
"errorMessage" : "Operation DB failed"
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code" : "LTS.0414",
  "error_msg" : "Invalid token"
}
```

**Status code: 403**

Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code" : "LTS.0003",
  "error_msg" : "parse_token_failed"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.0102",
  "error_msg" : "ServiceUnavailable."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ShowAomMappingRulesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
```

```
        .withSk(sk);

    LtsClient client = LtsClient.newBuilder()
        .withCredential(auth)
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();
    ShowAomMappingRulesRequest request = new ShowAomMappingRulesRequest();
    try {
        ShowAomMappingRulesResponse response = client.showAomMappingRules(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

## Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowAomMappingRulesRequest()
        response = client.show_aom_mapping_rules(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
```

```

"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowAomMappingRulesRequest{}
    response, err := client.ShowAomMappingRules(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Details of all ingestion rules are returned.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.



## Error Codes

See [Error Codes](#).

## 6.9.5 Querying an Ingestion Rule

### Function

This API is used to query a specific rule of ingesting container logs from AOM to LTS.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/lts/aom-mapping/{rule\_id}

**Table 6-472** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
rule_id	Yes	String	Ingestion rule ID. Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-473** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-474** Response body parameters

Parameter	Type	Description
[items]	Array of <a href="#">CreateAomMappingRuleResp</a> objects	

**Table 6-475** CreateAomMappingRuleResp

Parameter	Type	Description
project_id	String	Project ID.
rule_name	String	Ingestion rule name.
rule_id	String	Ingestion rule ID.
rule_info	<a href="#">AomMappingRuleInfoRespBody</a> object	Ingestion rule details.

**Table 6-476** AomMappingRuleInfoRespBody

Parameter	Type	Description
cluster_id	String	Cluster ID.
cluster_name	String	Cluster name.
deployments_prefix	String	Log stream prefix.
deployments	Array of strings	Workload.
namespace	String	Namespace
container_name	String	Container name
files	Array of <a href="#">AomMappingfileInfos</a> objects	Ingestion rule details.

**Table 6-477** AomMappingfilesInfos

Parameter	Type	Description
file_name	String	Path name.
log_stream_info	<a href="#">AomMappingLogStreamInfos</a> object	Ingestion rule details.

**Table 6-478** AomMappingLogStreamInfos

Parameter	Type	Description
target_log_group_id	String	Log group ID.
target_log_group_name	String	Target log group name.
target_log_stream_id	String	Log stream ID.
target_log_stream_name	String	Target log stream name.

**Status code: 400**

**Table 6-479** Response body parameters

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0014</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Operation DB failed</b></li> </ul>

**Status code: 401**

**Table 6-480** Response body parameters

Parameter	Type	Description
message	<a href="#">Message401</a> object	Response message.

**Table 6-481** Message401

Parameter	Type	Description
code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0001</b></li> </ul>
details	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>project verify error</b></li> </ul>

**Status code: 403**

**Table 6-482** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>• <b>LTS.0403</b></li> </ul>

Parameter	Type	Description
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 500**

**Table 6-483** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Enumeration values: <ul style="list-style-type: none"> <li>LTS.0403</li> </ul>
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

None

## Example Responses

**Status code: 200**

Details of the ingestion rule are returned.

```
[{
  "project_id": "",
  "rule_id": "",
  "rule_info": {
    "cluster_id": "",
    "cluster_name": "",
    "container_name": "",
    "deployments": [ "" ],
    "files": [ {
      "file_name": "",
      "log_stream_info": {
        "target_log_group_id": "",
        "target_log_group_name": "",
        "target_log_stream_id": "",
        "target_log_stream_name": ""
      }
    }
  ],
  "namespace": ""
},
"rule_name": ""
}]
```

**Status code: 400**

Bad Request: The request is invalid. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "errorCode": "LTS.0014",
  "errorMessage": "Operation DB failed"
}
```

**Status code: 401**

AuthFailed. Authentication failed. Check the token and try again.

```
{
  "error_code": "LTS.0414",
  "error_msg": "Invalid token"
}
```

**Status code: 403**

Forbidden. The request has been rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.

```
{
  "error_code": "LTS.0003",
  "error_msg": "parse_token_failed"
}
```

**Status code: 500**

InternalServerError.

The server has received the request but encountered an internal error.

```
{
  "error_code": "LTS.0102",
  "error_msg": "ServiceUnavailable."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ShowAomMappingRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
```

```
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
ShowAomMappingRuleRequest request = new ShowAomMappingRuleRequest();
request.withRuleId("{rule_id}");
try {
    ShowAomMappingRuleResponse response = client.showAomMappingRule(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowAomMappingRuleRequest()
        request.rule_id = "{rule_id}"
        response = client.show_aom_mapping_rule(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowAomMappingRuleRequest{}
    request.RuleId = "{rule_id}"
    response, err := client.ShowAomMappingRule(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Details of the ingestion rule are returned.
400	Bad Request: The request is invalid. Modify the request based on the description in <b>error_msg</b> before a retry.
401	AuthFailed. Authentication failed. Check the token and try again.
403	Forbidden.The request has been rejected.The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.



Status Code	Description
500	InternalServerError. The server has received the request but encountered an internal error.
503	ServiceUnavailable. The requested service is unavailable.

## Error Codes

See [Error Codes](#).

## 6.10 Alarm Topics

### 6.10.1 Querying an SMN Topic

#### Function

This API is used to query an SMN topic.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2/{project\_id}/lts/notifications/topics

**Table 6-484** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

**Table 6-485** Query Parameters

Parameter	Mandatory	Type	Description
offset	Yes	Integer	Query cursor. Set the value to 0 in the first query. In subsequent queries, obtain the value from the response to the last request. Minimum: <b>0</b> Maximum: <b>1024</b>
limit	Yes	Integer	Number of records on each page. The maximum value is 100. Minimum: <b>0</b> Maximum: <b>100</b>
fuzzy_name	No	String	Specifies the name of the topic to be searched for, which is fuzzy match. startwith is used for the fuzzy match.

## Request Parameters

**Table 6-486** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-487** Response body parameters

Parameter	Type	Description
request_id	String	request_id Minimum: <b>1</b> Maximum: <b>64</b>
topic_count	Integer	Number of topics. Minimum: <b>0</b> Maximum: <b>1000</b>
topics	Array of <b>Topics</b> objects	Topic information.

**Table 6-488** Topics

Parameter	Type	Description
name	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>
display_name	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

## Example Requests

Querying an SMN topic

```
POST https://{endpoint}/v2/{project_id}/lts/notifications/topics
/v2/{project_id}/lts/notifications/topics?offset={offset}&limit={limit}
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "request_id": "1",
  "topic_count": 100,
  "topics": [ {
    "name": "huawei",
    "topic_urn": "urn:smn:cn-north-7:{projectId}:fyy",
    "display_name": "",
    "push_policy": 0
  } ]
}
```

## Status Codes

Status Code	Description
200	The request is successful.

## Error Codes

See [Error Codes](#).

# 6.11 Message Template Management

## 6.11.1 Creating a Message Template

### Function

This API is used to create a notification template. Currently, each account can create a maximum of 100 notification templates. After a notification template is created, its name cannot be changed.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/{domain\_id}/lts/events/notification/templates

**Table 6-489** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-490** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-491** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Notification rule name, which is mandatory. The value can contain only digits, letters, underscores ( <code>_</code> ), and hyphens ( <code>-</code> ), and cannot start or end with special characters such as underscores ( <code>_</code> ). The value can contain 1 to 100 characters and cannot be changed after being created. Minimum: <b>1</b> Maximum: <b>100</b>
type	No	Array of strings	This field is reserved and optional.
desc	No	String	Template description, which is optional. Enter a maximum of 1,024 characters, including only digits, letters, and underscores ( <code>_</code> ). Do not start or end with an underscore ( <code>_</code> ). Minimum: <b>0</b> Maximum: <b>1024</b>
source	Yes	String	Template source. Currently, this parameter must be set to LTS. Otherwise, the template cannot be filtered. Minimum: <b>3</b> Maximum: <b>3</b>
locale	Yes	String	Language, which is mandatory. The value can be <b>zh-cn</b> or <b>en-us</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
templates	Yes	Array of <b>SubTemplate</b> objects	Template body is an array.

**Table 6-492** SubTemplate

Parameter	Mandatory	Type	Description
sub_type	Yes	String	Template subtype. Only the following types are supported: sms, dingding, wechat, webhook, and email. Enumeration values: <ul style="list-style-type: none"><li>• <b>sms</b></li><li>• <b>dingding</b></li><li>• <b>wechat</b></li><li>• <b>webhook</b></li><li>• <b>email</b></li><li>• <b>voice</b></li></ul>

Parameter	Mandatory	Type	Description
content	Yes	String	<p>In the subtemplate body, the variables following the dollar sign (\$) can only be the following variables. The supported variables vary according to the alarm type (keyword or SQL). Currently, the two alarm types have the following common variables:</p> <p>Severity: <code>\${event_severity}</code>;</p> <p>Occurred: <code>\${starts_at}</code>;</p> <p>Alarm source: <code>\$event.metadata.resource_provider</code>;</p> <p>Resource type: <code>\$event.metadata.resource_type</code>;</p> <p>Resource ID: <code>\${resources}</code>;</p> <p>Statistical type: by keyword;</p> <p>Expression: <code>\$event.annotations.condition_expression</code>;</p> <p>Current value: <code>\$event.annotations.current_value</code>;</p> <p>Statistical period: <code>\$event.annotations.frequency</code>;</p> <p>Variables specific to keyword alarms:</p> <p>Query time: <code>\$event.annotations.results[0].time</code>;</p> <p>Query log: <code>\$event.annotations.results[0].raw_results</code>;</p> <p>Variables specific to SQL alarms:</p> <p>Log group/stream name: <code>\$event.annotations.results[0].resource_id</code>;</p> <p>Query statement: <code>\$event.annotations.results[0].sql</code>;</p>



Parameter	Mandatory	Type	Description
			<p>Query time: \$event.annotations.results[0].time;</p> <p>Query URL: \$event.annotations.results[0].url; Query log: \$event.annotations.results[0].raw_results;</p> <p><b>NOTE</b> Each variable must be followed by an English semicolon (;). Otherwise, the template replacement fails.</p> <p>Minimum: <b>2</b> Maximum: <b>1024</b></p>
topic	No	String	Email subject. This parameter is valid only when <b>sub_type</b> is set to <b>email</b> .

## Response Parameters

Status code: 200

**Table 6-493** Response body parameters

Parameter	Type	Description
name	String	<p>Notification rule name, which is mandatory. The value can contain only digits, letters, underscores (<code>_</code>), and hyphens (<code>-</code>), and cannot start or end with special characters such as underscores (<code>_</code>). The value can contain 1 to 100 characters and cannot be changed after being created.</p> <p>Minimum: <b>1</b> Maximum: <b>100</b></p>
type	Array of strings	This field is reserved and optional.
desc	String	<p>Template description, which is optional. Enter a maximum of 1,024 characters, including only digits, letters, and underscores (<code>_</code>). Do not start or end with an underscore (<code>_</code>).</p> <p>Minimum: <b>0</b> Maximum: <b>1024</b></p>

Parameter	Type	Description
source	String	Template source. Currently, this parameter must be set to LTS. Otherwise, the template cannot be filtered. Minimum: <b>3</b> Maximum: <b>3</b>
locale	String	Language, which is mandatory. The value can be <b>zh-cn</b> or <b>en-us</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
templates	Array of <b>SubTemplateResBody</b> objects	Template body, which is an array.

**Table 6-494** SubTemplateResBody

Parameter	Type	Description
sub_type	String	Template subtype. Only the following types are supported: sms, dingding, wechat, webhook, and email. Value: Enumeration values: <ul style="list-style-type: none"> <li>• <b>sms</b></li> <li>• <b>dingding</b></li> <li>• <b>wechat</b></li> <li>• <b>webhook</b></li> <li>• <b>email</b></li> <li>• <b>voice</b></li> </ul>

Parameter	Type	Description
content	String	<p>In the subtemplate body, the variables following the dollar sign (\$) can only be the following variables. The supported variables vary according to the alarm type (keyword or SQL). Currently, the two alarm types have the following common variables:</p> <p>Severity: <code>\${event_severity}</code>;            Occurred: <code>\${starts_at}</code>;            Alarm source:  <code>\$event.metadata.resource_provider</code>;            Resource type:  <code>\$event.metadata.resource_type</code>;            Resource ID: <code>\${resources}</code>;            Statistical type: by keyword;            Expression:  <code>\$event.annotations.condition_expression</code>;            Current value:  <code>\$event.annotations.current_value</code>;            Statistical period:  <code>\$event.annotations.frequency</code>;            Variables specific to keyword alarms:            Query time:  <code>\$event.annotations.results[0].time</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;            Variables specific to SQL alarms:            Log group/stream name:  <code>\$event.annotations.results[0].resource_id</code>;            Query statement:  <code>\$event.annotations.results[0].sql</code>;            Query time:  <code>\$event.annotations.results[0].time</code>;            Query URL:  <code>\$event.annotations.results[0].url</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;</p> <p><b>NOTE</b>            Each variable must be followed by an English semicolon (;). Otherwise, the template replacement fails.</p>

Parameter	Type	Description
topic	String	Email subject. This parameter is valid only when <b>sub_type</b> is set to <b>email</b> .

**Status code: 400**

**Table 6-495** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-496** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

### Creating a message template

POST https://{endpoint}/v2/{project\_id}/{domain\_id}/lts/events/notification/templates

```
{
  "name" : "xxx",
  "desc" : "xxxxxx",
  "type" : [ ],
  "source" : "LTS",
  "locale" : "zh-cn",
  "templates" : [ {
    "sub_type" : "sms",
    "content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
  }, {
    "sub_type" : "dingding",
    "content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
  }, {
```

```
"sub_type" : "wechat",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
}, {
"sub_type" : "webhook",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
}, {
"sub_type" : "email",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nAlarm source:
$event.metadata.resource_provider;\nResource type: $event.metadata.resource_type;\nResource ID: $
{resources};\nStatistical type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent
value: $event.annotations.current_value;\nStatistical period: $event.annotations.frequency;\nQuery time:
$event.annotations.results[0].time;\nQuery log: $event.annotations.results[0].raw_results;"
}, {
"sub_type" : "voice",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
}
}]]
}
```

## Example Responses

### Status code: 200

The request is successful.

```
{
"desc" : "description",
"locale" : "zh-cn",
"name" : "postman-test",
"source" : "LTS",
"templates" : [ {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
, "sub_type" : "sms"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
, "sub_type" : "dingding"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
, "sub_type" : "wechat"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
, "sub_type" : "webhook"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nAlarm source:
$event.metadata.resource_provider;\nResource type: $event.metadata.resource_type;\nResource ID: $
{resources};\nStatistical type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent
value: $event.annotations.current_value;\nStatistical period: $event.annotations.frequency;\nQuery time:
$event.annotations.results[0].time;\nQuery log: $event.annotations.results[0].raw_results;"
, "sub_type" : "email"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
, "sub_type" : "voice"
}
],
}
```

```
"type" : [ ]
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2014",
  "error_msg" : "desc is invalid!"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2014",
  "error_msg" : "Failed to create notification template."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a message template

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateNotificationTemplateSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateNotificationTemplateRequest request = new CreateNotificationTemplateRequest();
        request.withDomainId("{domain_id}");
        CreateNotificationTemplateRequestBody body = new CreateNotificationTemplateRequestBody();
        List<SubTemplate> listbodyTemplates = new ArrayList<>();
```

```

        listbodyTemplates.add(
            new SubTemplate()
                .withSubType(SubTemplate.SubTypeEnum.fromValue("sms"))
                .withContent("Severity: ${event_severity}");
    Occurred: ${starts_at};
    Resource ID: ${resources};
    Statistical type: by keyword;
    Expression: $event.annotations.condition_expression;
    Current value: $event.annotations.current_value;
    Statistical period: $event.annotations.frequency;"
        );
        listbodyTemplates.add(
            new SubTemplate()
                .withSubType(SubTemplate.SubTypeEnum.fromValue("dingding"))
                .withContent("Severity: ${event_severity}");
    Occurred: ${starts_at};
    Resource ID: ${resources};
    Statistical type: by keyword;
    Expression: $event.annotations.condition_expression;
    Current value: $event.annotations.current_value;
    Statistical period: $event.annotations.frequency;"
        );
        listbodyTemplates.add(
            new SubTemplate()
                .withSubType(SubTemplate.SubTypeEnum.fromValue("wechat"))
                .withContent("Severity: ${event_severity}");
    Occurred: ${starts_at};
    Resource ID: ${resources};
    Statistical type: by keyword;
    Expression: $event.annotations.condition_expression;
    Current value: $event.annotations.current_value;
    Statistical period: $event.annotations.frequency;"
        );
        listbodyTemplates.add(
            new SubTemplate()
                .withSubType(SubTemplate.SubTypeEnum.fromValue("webhook"))
                .withContent("Severity: ${event_severity}");
    Occurred: ${starts_at};
    Resource ID: ${resources};
    Statistical type: by keyword;
    Expression: $event.annotations.condition_expression;
    Current value: $event.annotations.current_value;
    Statistical period: $event.annotations.frequency;"
        );
        listbodyTemplates.add(
            new SubTemplate()
                .withSubType(SubTemplate.SubTypeEnum.fromValue("email"))
                .withContent("Severity: ${event_severity}");
    Occurred: ${starts_at};
    Alarm source: $event.metadata.resource_provider;
    Resource type: $event.metadata.resource_type;
    Resource ID: ${resources};
    Statistical type: by keyword;
    Expression: $event.annotations.condition_expression;
    Current value: $event.annotations.current_value;
    Statistical period: $event.annotations.frequency;
    Query time: $event.annotations.results[0].time;
    Query log: $event.annotations.results[0].raw_results;"
        );
        listbodyTemplates.add(
            new SubTemplate()
                .withSubType(SubTemplate.SubTypeEnum.fromValue("voice"))
                .withContent("Severity: ${event_severity}");
    Occurred: ${starts_at};
    Resource ID: ${resources};
    Statistical type: by keyword;
    Expression: $event.annotations.condition_expression;
    Current value: $event.annotations.current_value;
    Statistical period: $event.annotations.frequency;"
        );
    
```

```
);
body.withTemplates(listbodyTemplates);
body.withLocale(CreateNotificationTemplateRequestBody.LocaleEnum.fromValue("zh-cn"));
body.withSource("LTS");
body.withDesc("xxxxxx");
body.withName("xxx");
request.withBody(body);
try {
    CreateNotificationTemplateResponse response = client.createNotificationTemplate(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Creating a message template

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateNotificationTemplateRequest()
        request.domain_id = "{domain_id}"
        listTemplatesbody = [
            SubTemplate(
                sub_type="sms",
                content="Severity: ${event_severity};
                Occurred: ${starts_at};
                Resource ID: ${resources};
                Statistical type: by keyword;
                Expression: $event.annotations.condition_expression;
                Current value: $event.annotations.current_value;
                Statistical period: $event.annotations.frequency;"
            ),
            SubTemplate(
                sub_type="dingding",
                content="Severity: ${event_severity};
```



```
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    ),
    SubTemplate(
        sub_type="wechat",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    ),
    SubTemplate(
        sub_type="webhook",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    ),
    SubTemplate(
        sub_type="email",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Alarm source: $event.metadata.resource_provider;
Resource type: $event.metadata.resource_type;
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;
Query time: $event.annotations.results[0].time;
Query log: $event.annotations.results[0].raw_results;"
    ),
    SubTemplate(
        sub_type="voice",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    )
]
request.body = CreateNotificationTemplateRequestBody(
    templates=listTemplatesbody,
    locale="zh-cn",
    source="LTS",
    desc="xxxxxx",
    name="xxx"
)
response = client.create_notification_template(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Creating a message template

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateNotificationTemplateRequest{}
    request.DomainId = "{domain_id}"
    var listTemplatesbody = []model.SubTemplate{
        {
            SubType: model.GetSubTemplateSubTypeEnum().SMS,
            Content: "Severity: ${event_severity};
            Occurred: ${starts_at};
            Resource ID: ${resources};
            Statistical type: by keyword;
            Expression: $event.annotations.condition_expression;
            Current value: $event.annotations.current_value;
            Statistical period: $event.annotations.frequency;",
        },
        {
            SubType: model.GetSubTemplateSubTypeEnum().DINGDING,
            Content: "Severity: ${event_severity};
            Occurred: ${starts_at};
            Resource ID: ${resources};
            Statistical type: by keyword;
            Expression: $event.annotations.condition_expression;
            Current value: $event.annotations.current_value;
            Statistical period: $event.annotations.frequency;",
        },
        {
            SubType: model.GetSubTemplateSubTypeEnum().WECHAT,
            Content: "Severity: ${event_severity};
            Occurred: ${starts_at};
            Resource ID: ${resources};
            Statistical type: by keyword;
            Expression: $event.annotations.condition_expression;
            Current value: $event.annotations.current_value;
            Statistical period: $event.annotations.frequency;",
        },
        {
            SubType: model.GetSubTemplateSubTypeEnum().WEBHOOK,
```

```

        Content: "Severity: ${event_severity}";
        Occurred: ${starts_at};
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
        Statistical period: $event.annotations.frequency;";
    },
    {
        SubType: model.GetSubTemplateSubTypeEnum().EMAIL,
        Content: "Severity: ${event_severity}";
        Occurred: ${starts_at};
        Alarm source: $event.metadata.resource_provider;
        Resource type: $event.metadata.resource_type;
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
        Statistical period: $event.annotations.frequency;
        Query time: $event.annotations.results[0].time;
        Query log: $event.annotations.results[0].raw_results;";
    },
    {
        SubType: model.GetSubTemplateSubTypeEnum().VOICE,
        Content: "Severity: ${event_severity}";
        Occurred: ${starts_at};
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
        Statistical period: $event.annotations.frequency;";
    }
}
descCreateNotificationTemplateRequestBody:= "xxxxxx"
request.Body = &model.CreateNotificationTemplateRequestBody{
    Templates: listTemplatesbody,
    Locale: model.GetCreateNotificationTemplateRequestBodyLocaleEnum().ZH_CN,
    Source: "LTS",
    Desc: &descCreateNotificationTemplateRequestBody,
    Name: "xxx",
}
response, err := client.CreateNotificationTemplate(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.

Status Code	Description
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.11.2 Modifying a Message Template

### Function

This API is used to modify a notification template base on its name.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/{project\_id}/{domain\_id}/lts/events/notification/templates

**Table 6-497** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-498** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-499** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Notification rule name, which is mandatory. The value can contain only digits, letters, underscores ( <code>_</code> ), and hyphens ( <code>-</code> ), and cannot start or end with special characters such as underscores ( <code>_</code> ). The value can contain 1 to 100 characters and cannot be changed after being created. Minimum: <b>1</b> Maximum: <b>100</b>
type	No	Array of strings	This field is reserved and optional.
desc	No	String	Template description, which is optional. Enter a maximum of 1,024 characters, including only digits, letters, and underscores ( <code>_</code> ). Do not start or end with an underscore ( <code>_</code> ). Minimum: <b>0</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
source	Yes	String	Template source. Currently, this parameter must be set to LTS. Otherwise, the template cannot be filtered. Minimum: <b>3</b> Maximum: <b>3</b>
locale	Yes	String	Language, which is mandatory. The value can be <b>zh-cn</b> or <b>en-us</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
templates	Yes	Array of <b>UpdateSubTemplate</b> objects	Template body, which is an array.

**Table 6-500** UpdateSubTemplate

Parameter	Mandatory	Type	Description
sub_type	Yes	String	Template subtype. Only the following types are supported: sms, dingding, wechat, webhook, email, and voice. Enumeration values: <ul style="list-style-type: none"> <li>• <b>sms</b></li> <li>• <b>dingding</b></li> <li>• <b>wechat</b></li> <li>• <b>webhook</b></li> <li>• <b>email</b></li> <li>• <b>voice</b></li> </ul>

Parameter	Mandatory	Type	Description
content	Yes	String	<p>In the subtemplate body, the variables following the dollar sign (\$) can only be the following variables. The supported variables vary according to the alarm type (keyword or SQL). Currently, the two alarm types have the following common variables:</p> <p>Severity: <code>\${event_severity}</code>;</p> <p>Occurred: <code>\${starts_at}</code>;</p> <p>Alarm source: <code>\$event.metadata.resource_provider</code>;</p> <p>Resource type: <code>\$event.metadata.resource_type</code>;</p> <p>Resource ID: <code>\${resources}</code>;</p> <p>Statistical type: by keyword;</p> <p>Expression: <code>\$event.annotations.condition_expression</code>;</p> <p>Current value: <code>\$event.annotations.current_value</code>;</p> <p>Statistical period: <code>\$event.annotations.frequency</code>;</p> <p>Variables specific to keyword alarms:</p> <p>Query time: <code>\$event.annotations.results[0].time</code>;</p> <p>Query log: <code>\$event.annotations.results[0].raw_results</code>;</p> <p>Variables specific to SQL alarms:</p> <p>Log group/stream name: <code>\$event.annotations.results[0].resource_id</code>;</p> <p>Query statement: <code>\$event.annotations.results[0].sql</code>;</p>

Parameter	Mandatory	Type	Description
			<p>Query time: \$event.annotations.results[0].time;</p> <p>Query URL: \$event.annotations.results[0].url;</p> <p>Query log: \$event.annotations.results[0].raw_results;</p> <p><b>NOTE</b> Each variable must be followed by an English semicolon (;). Otherwise, the template replacement fails.</p>
topic	No	String	Email subject. This parameter is valid only when <b>sub_type</b> is set to <b>email</b> .

## Response Parameters

Status code: 201

**Table 6-501** Response body parameters

Parameter	Type	Description
name	String	<p>Notification rule name, which is mandatory. The value can contain only digits, letters, underscores (<code>_</code>), and hyphens (<code>-</code>), and cannot start or end with special characters such as underscores (<code>_</code>). The value can contain 1 to 100 characters and cannot be changed after being created.</p> <p>Minimum: <b>1</b> Maximum: <b>100</b></p>
type	Array of strings	This field is reserved and optional.
desc	String	<p>Template description, which is optional. Enter a maximum of 1,024 characters, including only digits, letters, and underscores (<code>_</code>). <i>Do not start or end with an underscore (<code>_</code>).</i></p> <p>Minimum: <b>0</b> Maximum: <b>1024</b></p>



Parameter	Type	Description
source	String	Template source. Currently, this parameter must be set to LTS. Otherwise, the template cannot be filtered. Minimum: <b>3</b> Maximum: <b>3</b>
locale	String	Language, which is mandatory. The value can be <b>zh-cn</b> or <b>en-us</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
templates	Array of <b>SubTemplateResBody</b> objects	Template body, which is an array.

**Table 6-502** SubTemplateResBody

Parameter	Type	Description
sub_type	String	Template subtype. Only the following types are supported: sms, dingding, wechat, webhook, and email. Value: Enumeration values: <ul style="list-style-type: none"> <li>• <b>sms</b></li> <li>• <b>dingding</b></li> <li>• <b>wechat</b></li> <li>• <b>webhook</b></li> <li>• <b>email</b></li> <li>• <b>voice</b></li> </ul>

Parameter	Type	Description
content	String	<p>In the subtemplate body, the variables following the dollar sign (\$) can only be the following variables. The supported variables vary according to the alarm type (keyword or SQL). Currently, the two alarm types have the following common variables:</p> <p>Severity: <code>\${event_severity}</code>;            Occurred: <code>\${starts_at}</code>;            Alarm source:  <code>\$event.metadata.resource_provider</code>;            Resource type:  <code>\$event.metadata.resource_type</code>;            Resource ID: <code>\${resources}</code>;            Statistical type: by keyword;            Expression:  <code>\$event.annotations.condition_expression</code>;            Current value:  <code>\$event.annotations.current_value</code>;            Statistical period:  <code>\$event.annotations.frequency</code>;            Variables specific to keyword alarms:            Query time:  <code>\$event.annotations.results[0].time</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;            Variables specific to SQL alarms:            Log group/stream name:  <code>\$event.annotations.results[0].resource_id</code>;            Query statement:  <code>\$event.annotations.results[0].sql</code>;            Query time:  <code>\$event.annotations.results[0].time</code>;            Query URL:  <code>\$event.annotations.results[0].url</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;</p> <p><b>NOTE</b>            Each variable must be followed by an English semicolon (;). Otherwise, the template replacement fails.</p>

Parameter	Type	Description
topic	String	Email subject. This parameter is valid only when <b>sub_type</b> is set to <b>email</b> .

**Status code: 400**

**Table 6-503** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-504** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

### Modifying a message template

PUT https://{endpoint}/v2/{project\_id}/{domain\_id}/lts/events/notification/templates

```
{
  "name": "xxx",
  "desc": "xxxxxx",
  "type": [ ],
  "source": "LTS",
  "locale": "zh-cn",
  "templates": [ {
    "sub_type": "sms",
    "content": "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
  }, {
    "sub_type": "dingding",
    "content": "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
  }, {
```

```
"sub_type" : "wechat",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
}, {
"sub_type" : "webhook",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
}, {
"sub_type" : "email",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nAlarm source:
$event.metadata.resource_provider;\nResource type: $event.metadata.resource_type;\nResource ID: $
{resources};\nStatistical type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent
value: $event.annotations.current_value;\nStatistical period: $event.annotations.frequency;\nQuery time:
$event.annotations.results[0].time;\nQuery log: $event.annotations.results[0].raw_results;"
}, {
"sub_type" : "voice",
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
}]
}]
}
```

## Example Responses

### Status code: 201

The request is successful.

```
{
"desc" : "description",
"locale" : "zh-cn",
"name" : "postman-test1",
"source" : "LTS",
"templates" : [ {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
,"sub_type" : "sms"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
,"sub_type" : "dingding"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
,"sub_type" : "wechat"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
,"sub_type" : "webhook"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nAlarm source:
$event.metadata.resource_provider;\nResource type: $event.metadata.resource_type;\nResource ID: $
{resources};\nStatistical type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent
value: $event.annotations.current_value;\nStatistical period: $event.annotations.frequency;\nQuery time:
$event.annotations.results[0].time;\nQuery log: $event.annotations.results[0].raw_results;"
,"sub_type" : "email"
}, {
"content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;"
,"sub_type" : "voice"
}
],
}
```

```
"type" : [ ]  
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{  
  "error_code" : "LTS.2016",  
  "error_msg" : "desc is invalid!"  
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{  
  "error_code" : "LTS.2016",  
  "error_msg" : "Failed to update notification template"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Modifying a message template

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class UpdateNotificationTemplateSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        LtsClient client = LtsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        UpdateNotificationTemplateRequest request = new UpdateNotificationTemplateRequest();  
        request.withDomainId("{domain_id}");  
        CreateNotificationTemplateRequestBody body = new CreateNotificationTemplateRequestBody();  
        List<SubTemplate> listbodyTemplates = new ArrayList<>();  
    }  
}
```

```
listbodyTemplates.add(
    new SubTemplate()
        .withSubType(SubTemplate.SubTypeEnum.fromValue("sms"))
        .withContent("Severity: ${event_severity}");
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
);
listbodyTemplates.add(
    new SubTemplate()
        .withSubType(SubTemplate.SubTypeEnum.fromValue("dingding"))
        .withContent("Severity: ${event_severity}");
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
);
listbodyTemplates.add(
    new SubTemplate()
        .withSubType(SubTemplate.SubTypeEnum.fromValue("wechat"))
        .withContent("Severity: ${event_severity}");
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
);
listbodyTemplates.add(
    new SubTemplate()
        .withSubType(SubTemplate.SubTypeEnum.fromValue("webhook"))
        .withContent("Severity: ${event_severity}");
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
);
listbodyTemplates.add(
    new SubTemplate()
        .withSubType(SubTemplate.SubTypeEnum.fromValue("email"))
        .withContent("Severity: ${event_severity}");
Occurred: ${starts_at};
Alarm source: $event.metadata.resource_provider;
Resource type: $event.metadata.resource_type;
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;
Query time: $event.annotations.results[0].time;
Query log: $event.annotations.results[0].raw_results;"
);
listbodyTemplates.add(
    new SubTemplate()
        .withSubType(SubTemplate.SubTypeEnum.fromValue("voice"))
        .withContent("Severity: ${event_severity}");
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
```

```
);
body.withTemplates(listbodyTemplates);
body.withLocale(CreateNotificationTemplateRequestBody.LocaleEnum.fromValue("zh-cn"));
body.withSource("LTS");
body.withDesc("xxxxxx");
body.withName("xxx");
request.withBody(body);
try {
    UpdateNotificationTemplateResponse response = client.updateNotificationTemplate(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Modifying a message template

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateNotificationTemplateRequest()
        request.domain_id = "{domain_id}"
        listTemplatesbody = [
            SubTemplate(
                sub_type="sms",
                content="Severity: ${event_severity};
                Occurred: ${starts_at};
                Resource ID: ${resources};
                Statistical type: by keyword;
                Expression: $event.annotations.condition_expression;
                Current value: $event.annotations.current_value;
                Statistical period: $event.annotations.frequency;"
            ),
            SubTemplate(
                sub_type="dingding",
                content="Severity: ${event_severity};
```

```
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    ),
    SubTemplate(
        sub_type="wechat",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    ),
    SubTemplate(
        sub_type="webhook",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    ),
    SubTemplate(
        sub_type="email",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Alarm source: $event.metadata.resource_provider;
Resource type: $event.metadata.resource_type;
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;
Query time: $event.annotations.results[0].time;
Query log: $event.annotations.results[0].raw_results;"
    ),
    SubTemplate(
        sub_type="voice",
        content="Severity: ${event_severity};
Occurred: ${starts_at};
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;"
    )
]
request.body = CreateNotificationTemplateRequestBody(
    templates=listTemplatesbody,
    locale="zh-cn",
    source="LTS",
    desc="xxxxxx",
    name="xxx"
)
response = client.update_notification_template(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```



## Go

### Modifying a message template

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateNotificationTemplateRequest{}
    request.DomainId = "{domain_id}"
    var listTemplatesbody = []model.SubTemplate{
        {
            SubType: model.GetSubTemplateSubTypeEnum().SMS,
            Content: "Severity: ${event_severity};
            Occurred: ${starts_at};
            Resource ID: ${resources};
            Statistical type: by keyword;
            Expression: $event.annotations.condition_expression;
            Current value: $event.annotations.current_value;
            Statistical period: $event.annotations.frequency;",
        },
        {
            SubType: model.GetSubTemplateSubTypeEnum().DINGDING,
            Content: "Severity: ${event_severity};
            Occurred: ${starts_at};
            Resource ID: ${resources};
            Statistical type: by keyword;
            Expression: $event.annotations.condition_expression;
            Current value: $event.annotations.current_value;
            Statistical period: $event.annotations.frequency;",
        },
        {
            SubType: model.GetSubTemplateSubTypeEnum().WECHAT,
            Content: "Severity: ${event_severity};
            Occurred: ${starts_at};
            Resource ID: ${resources};
            Statistical type: by keyword;
            Expression: $event.annotations.condition_expression;
            Current value: $event.annotations.current_value;
            Statistical period: $event.annotations.frequency;",
        },
        {
            SubType: model.GetSubTemplateSubTypeEnum().WEBHOOK,
```

```

        Content: "Severity: ${event_severity}";
        Occurred: ${starts_at};
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
        Statistical period: $event.annotations.frequency;";
    },
    {
        SubType: model.GetSubTemplateSubTypeEnum().EMAIL,
        Content: "Severity: ${event_severity}";
        Occurred: ${starts_at};
        Alarm source: $event.metadata.resource_provider;
        Resource type: $event.metadata.resource_type;
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
        Statistical period: $event.annotations.frequency;
        Query time: $event.annotations.results[0].time;
        Query log: $event.annotations.results[0].raw_results;";
    },
    {
        SubType: model.GetSubTemplateSubTypeEnum().VOICE,
        Content: "Severity: ${event_severity}";
        Occurred: ${starts_at};
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
        Statistical period: $event.annotations.frequency;";
    }
}
descCreateNotificationTemplateRequestBody:= "xxxxxx"
request.Body = &model.CreateNotificationTemplateRequestBody{
    Templates: listTemplatesbody,
    Locale: model.GetCreateNotificationTemplateRequestBodyLocaleEnum().ZH_CN,
    Source: "LTS",
    Desc: &descCreateNotificationTemplateRequestBody,
    Name: "xxx",
}
response, err := client.UpdateNotificationTemplate(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.

Status Code	Description
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

### 6.11.3 Querying Message Templates

#### Function

This API is used to query the message template list.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2/{project\_id}/{domain\_id}/lts/events/notification/templates

**Table 6-505** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-506** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-507** Response body parameters

Parameter	Type	Description
results	Array of <a href="#">NotificationTemplate</a> objects	Template array.

**Table 6-508** NotificationTemplate

Parameter	Type	Description
name	String	Notification rule name, which is mandatory. The value can contain only digits, letters, underscores ( <code>_</code> ), and hyphens ( <code>-</code> ), and cannot start or end with special characters such as underscores ( <code>_</code> ). The value can contain 1 to 100 characters and cannot be changed after being created. Minimum: <b>1</b> Maximum: <b>100</b>
type	Array of strings	This field is reserved and optional.

Parameter	Type	Description
desc	String	Template description, which is optional. Enter a maximum of 1,024 characters, including only digits, letters, and underscores ( <code>_</code> ). <i>Do not start or end with an underscore (<code>_</code>).</i> Minimum: <b>0</b> Maximum: <b>1024</b>
source	String	Template source. Currently, this parameter must be set to LTS. Otherwise, the template cannot be filtered. Minimum: <b>3</b> Maximum: <b>3</b>
locale	String	Language, which is mandatory. The value can be <b>zh-cn</b> or <b>en-us</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
templates	Array of <a href="#">SubTemplateRes Body</a> objects	Template body, which is an array.
create_time	Long	Creation time (timestamp in milliseconds). Minimum: <b>0</b> Maximum: <b>1700000000000</b>
modify_time	Long	Update time (timestamp in milliseconds). Minimum: <b>0</b> Maximum: <b>1700000000000</b>
project_id	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Account ID, Project ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-509** SubTemplateResBody

Parameter	Type	Description
sub_type	String	Template subtype. Only the following types are supported: sms, dingding, wechat, webhook, and email. Value: Enumeration values: <ul style="list-style-type: none"><li>• <b>sms</b></li><li>• <b>dingding</b></li><li>• <b>wechat</b></li><li>• <b>webhook</b></li><li>• <b>email</b></li><li>• <b>voice</b></li></ul>

Parameter	Type	Description
content	String	<p>In the subtemplate body, the variables following the dollar sign (\$) can only be the following variables. The supported variables vary according to the alarm type (keyword or SQL). Currently, the two alarm types have the following common variables:</p> <p>Severity: <code>\${event_severity}</code>;            Occurred: <code>\${starts_at}</code>;            Alarm source:  <code>\$event.metadata.resource_provider</code>;            Resource type:  <code>\$event.metadata.resource_type</code>;            Resource ID: <code>\${resources}</code>;            Statistical type: by keyword;            Expression:  <code>\$event.annotations.condition_expression</code>;            Current value:  <code>\$event.annotations.current_value</code>;            Statistical period:  <code>\$event.annotations.frequency</code>;            Variables specific to keyword alarms:            Query time:  <code>\$event.annotations.results[0].time</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;            Variables specific to SQL alarms:            Log group/stream name:  <code>\$event.annotations.results[0].resource_id</code>;            Query statement:  <code>\$event.annotations.results[0].sql</code>;            Query time:  <code>\$event.annotations.results[0].time</code>;            Query URL:  <code>\$event.annotations.results[0].url</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;</p> <p><b>NOTE</b>            Each variable must be followed by an English semicolon (;). Otherwise, the template replacement fails.</p>

Parameter	Type	Description
topic	String	Email subject. This parameter is valid only when <b>sub_type</b> is set to <b>email</b> .

**Status code: 500**

**Table 6-510** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

Query the message template list.

```
GET https://{endpoint}/v2/{project_id}/{domain_id}/lts/events/notification/templates
/v2/{project_id}/{domain_id}/lts/events/notification/templates
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "results": [ {
    "create_time": 1701352010150,
    "desc": "This is the SMS test mode.",
    "locale": "zh-cn",
    "modify_time": 1701352010150,
    "name": "15nWzUsOHA",
    "project_id": "2a473356cca5487f8373be891bffc1cf",
    "source": "LTS",
    "templates": [ {
      "content": "\"This is an SMS test template.\"\"",
      "sub_type": "sms"
    } ],
    "type": [ "" ]
  }, {
    "create_time": 1702021411612,
    "desc": "This is the SMS test mode.",
    "locale": "zh-cn",
    "modify_time": 1702021411612,
    "name": "RZ2ObeluNN",
    "project_id": "2a473356cca5487f8373be891bffc1cf",
    "source": "LTS",
    "templates": [ {
      "content": "\"This is an SMS test template.\"\"",
      "sub_type": "sms"
    } ],
  } ],
}
```



```
"type" : [ "" ]
}]
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2017",
  "error_msg" : "Find Alarm rule failed."
}
```

## Status Codes

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.11.4 Deleting a Message Template

### Function

This API is used to delete a notification template.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/{project\_id}/{domain\_id}/lts/events/notification/templates

**Table 6-511** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-512** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-513** Request body parameters

Parameter	Mandatory	Type	Description
template_names	Yes	Array of strings	Array of names of templates to be deleted.

## Response Parameters

**Status code: 400**

**Table 6-514** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

**Status code: 500**

**Table 6-515** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

Deleting a message template

```
DELETE https://{endpoint}/v2/{project_id}/{domain_id}/lts/events/notification/templates
/v2/{project_id}/{domain_id}/lts/events/notification/templates
{"template_names":["template1","template2"]}
```

## Example Responses

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2015",
  "error_msg" : "delete template name is empty or projectId is null"
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2015",
  "error_msg" : "Failed to delete notification template."
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

### Deleting a message template

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class DeleteNotificationTemplateSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteNotificationTemplateRequest request = new DeleteNotificationTemplateRequest();
        request.withDomainId("{domain_id}");
        try {
            DeleteNotificationTemplateResponse response = client.deleteNotificationTemplate(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

### Deleting a message template

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.

# In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]

credentials = BasicCredentials(ak, sk)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = DeleteNotificationTemplateRequest()
    request.domain_id = "{domain_id}"
    response = client.delete_notification_template(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Deleting a message template

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteNotificationTemplateRequest{}
    request.DomainId = "{domain_id}"
    response, err := client.DeleteNotificationTemplate(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
204	If the response body is empty, the request is successfully responded.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.11.5 Querying a Message Template

### Function

This API is used to query a notification template.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/{domain\_id}/lts/events/notification/template/{template\_name}

**Table 6-516** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
template_name	Yes	String	Name of the message template to be obtained. Minimum: <b>1</b> Maximum: <b>100</b>

## Request Parameters

**Table 6-517** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: **200**

**Table 6-518** Response body parameters

Parameter	Type	Description
name	String	Notification rule name, which is mandatory. The value can contain only digits, letters, underscores ( <code>_</code> ), and hyphens ( <code>-</code> ), and cannot start or end with special characters such as underscores ( <code>_</code> ). The value can contain 1 to 100 characters and cannot be changed after being created. Minimum: <b>1</b> Maximum: <b>100</b>
type	Array of strings	This field is reserved and optional.
desc	String	Template description, which is optional. Enter a maximum of 1,024 characters, including only digits, letters, and underscores ( <code>_</code> ). Do not start or end with an underscore ( <code>_</code> ). Minimum: <b>0</b> Maximum: <b>1024</b>
source	String	Template source. Currently, this parameter must be set to LTS. Otherwise, the template cannot be filtered. Minimum: <b>3</b> Maximum: <b>3</b>
locale	String	Language, which is mandatory. The value can be <b>zh-cn</b> or <b>en-us</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
templates	Array of <a href="#">SubTemplateRes Body</a> objects	Template body, which is an array.
create_time	Long	Creation time (timestamp in milliseconds). Minimum: <b>0</b> Maximum: <b>1700000000000</b>
modify_time	Long	Update time (timestamp in milliseconds). Minimum: <b>0</b> Maximum: <b>1700000000000</b>



Parameter	Type	Description
project_id	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Account ID, Project ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

**Table 6-519** SubTemplateResBody

Parameter	Type	Description
sub_type	String	Template subtype. Only the following types are supported: sms, dingding, wechat, webhook, and email. Value: Enumeration values: <ul style="list-style-type: none"> <li>• sms</li> <li>• dingding</li> <li>• wechat</li> <li>• webhook</li> <li>• email</li> <li>• voice</li> </ul>

Parameter	Type	Description
content	String	<p>In the subtemplate body, the variables following the dollar sign (\$) can only be the following variables. The supported variables vary according to the alarm type (keyword or SQL). Currently, the two alarm types have the following common variables:</p> <p>Severity: <code>\${event_severity}</code>;            Occurred: <code>\${starts_at}</code>;            Alarm source:  <code>\$event.metadata.resource_provider</code>;            Resource type:  <code>\$event.metadata.resource_type</code>;            Resource ID: <code>\${resources}</code>;            Statistical type: by keyword;            Expression:  <code>\$event.annotations.condition_expression</code>;            Current value:  <code>\$event.annotations.current_value</code>;            Statistical period:  <code>\$event.annotations.frequency</code>;            Variables specific to keyword alarms:            Query time:  <code>\$event.annotations.results[0].time</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;            Variables specific to SQL alarms:            Log group/stream name:  <code>\$event.annotations.results[0].resource_id</code>;            Query statement:  <code>\$event.annotations.results[0].sql</code>;            Query time:  <code>\$event.annotations.results[0].time</code>;            Query URL:  <code>\$event.annotations.results[0].url</code>;            Query log:  <code>\$event.annotations.results[0].raw_results</code>;</p> <p><b>NOTE</b>            Each variable must be followed by an English semicolon (;). Otherwise, the template replacement fails.</p>

Parameter	Type	Description
topic	String	Email subject. This parameter is valid only when <b>sub_type</b> is set to <b>email</b> .

**Status code: 500**

**Table 6-520** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>8</b>
error_msg	String	Error message.

## Example Requests

Querying a message template with a specified name

```
GET https://{endpoint}/v2/{project_id}/{domain_id}/lts/events/notification/template/{template_name}
/v2/{project_id}/{domain_id}/lts/events/notification/template/{template_name}
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "create_time": 1702955600631,
  "desc": "description",
  "locale": "zh-cn",
  "modify_time": 1702955600631,
  "name": "postman-test",
  "project_id": "2a473356cca5487f8373be891bffc1cf",
  "source": "LTS",
  "templates": [ {
    "content": "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;",
    "sub_type": "sms"
  }, {
    "content": "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;",
    "sub_type": "dingding"
  }, {
    "content": "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;",
    "sub_type": "wechat"
  }, {
    "content": "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:"
```

```

$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;",
  "sub_type" : "webhook"
}, {
  "content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nAlarm source:
$event.metadata.resource_provider;\nResource type: $event.metadata.resource_type;\nResource ID: $
${resources};\nStatistical type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent
value: $event.annotations.current_value;\nStatistical period: $event.annotations.frequency;\nQuery time:
$event.annotations.results[0].time;\nQuery log: $event.annotations.results[0].raw_results;",
  "sub_type" : "email"
}, {
  "content" : "Severity: ${event_severity};\nOccurred: ${starts_at};\nResource ID: ${resources};\nStatistical
type: by keyword;\nExpression: $event.annotations.condition_expression;\nCurrent value:
$event.annotations.current_value;\nStatistical period: $event.annotations.frequency;",
  "sub_type" : "voice"
}],
"type" : [ ]
}

```

**Status code: 500**

The server has received the request but encountered an internal error.

```

{
  "error_code" : "LTS.2018",
  "error_msg" : "Failed to get notification template."
}

```

**Status Codes**

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

**Error Codes**

See [Error Codes](#).

**6.11.6 Previewing the Email Format of a Message Template**

**Function**

This API is used to preview the email format of a notification template.

**Calling Method**

For details, see [Calling APIs](#).

**URI**

POST /v2/{project\_id}/{domain\_id}/lts/events/notification/templates/view

**Table 6-521** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-522** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-523** Request body parameters

Parameter	Mandatory	Type	Description
templates	Yes	String	Email template content. Minimum: <b>2</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
language	Yes	String	Language: zh-cn (Chinese), en-us (English) Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
source	Yes	String	Source. The value can only be LTS. Minimum: <b>3</b> Maximum: <b>3</b>

## Response Parameters

Status code: 200

Table 6-524 Response body parameters

Parameter	Type	Description
template	String	The value is an HTML text and needs to be parsed before being displayed. Minimum: <b>2</b> Maximum: <b>1024</b>

## Example Requests

Previewing the email format of a message template

```
POST https://{endpoint}/v2/{project_id}/{domain_id}/lts/events/notification/templates/view
{
  "templates": "Severity: ${event_severity};\nOccurred: ${starts_at};\nAlarm source:
${event.metadata.resource_provider};\nResource type: ${event.metadata.resource_type};\nResource ID: $
{resources};\nStatistical type: by keyword;\nExpression: ${event.annotations.condition_expression};\nCurrent
value: ${event.annotations.current_value};\nStatistical period: ${event.annotations.frequency};\nQuery time:
${event.annotations.results[0].time};\nQuery log: ${event.annotations.results[0].raw_results};"
  "language": "en-us",
  "source": "LTS"
}
```

## Example Responses

Status code: 200

The request is successful.

```
{
  "template": "<style> span { display: inline-block; float: left; font-size: 14px; } b
{ display: inline-block; float: left; color: #252B3A; font-size: 14px }</style><table
border=\"0\" cellpadding=\"0\" cellspacing=\"0\" style=\"font-
```

```
family:HuaweiFont,Helvetica,Arial,PingFangSC-Regular,Hiragino Sans GB;border-spacing:0px 14px;font-size:14px;padding-left: 30px;line-height:25px;"> <thead> <tr style="font-size:14px;"> <td colspan="2" style="line-height:28px;color:#6e6e6e;font-size:14px"> <b>Dear &nbsp;&nbsp;</b></td colspan="2"> <b>Huawei Cloud user,</b> <b>&nbsp;&nbsp;&nbsp;</b> </td> </tr> </thead> <tr> <td colspan="2"> <span>Your alarm rules set in the &nbsp;&nbsp;</span> <b>CN North-Beijing1</b><span>&nbsp;&nbsp;&nbsp;region</span> <b>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</b> <span>have a new</span><span>&nbsp;&nbsp;&nbsp;O&M notification</span> <span>. For more information, log in to LTS. </span><br> <br> </td> </tr> <tr style="font-size:14px;"> <td colspan="2"> <p style="margin-bottom: -20px; margin-top: -26px;"> <span style="color:#252B3A;line-height:24px">The details are as follows:</span> </p> </td> </tr> <td><div>Severity: critical;<br>Occurred: 2022-03-21 18:23:20 GMT+08:00;<br>Alarm source: N/A;<br>Resource type: N/A;<br>Resource ID: CCE;<br>Statistical type: by keyword;<br>Expression: N/A;<br>Current value: N/A;<br>Statistical period: N/A;<br>Query time: N/A;<br>Query log: N/A;<br></div></td> </table>">
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Previewing the email format of a message template

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListNotificationTemplateSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListNotificationTemplateRequest request = new ListNotificationTemplateRequest();
        request.withDomainId("{domain_id}");
        PreviewTemplateBody body = new PreviewTemplateBody();
        body.withSource("LTS");
        body.withLanguage(PreviewTemplateBody.LanguageEnum.fromValue("en-us"));
        body.withTemplates("Severity: ${event_severity};
        Occurred: ${starts_at};
        Alarm source: $event.metadata.resource_provider;
        Resource type: $event.metadata.resource_type;
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
```

```
Statistical period: $event.annotations.frequency;
Query time: $event.annotations.results[0].time;
Query log: $event.annotations.results[0].raw_results;");
request.withBody(body);
try {
    ListNotificationTemplateResponse response = client.listNotificationTemplate(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Previewing the email format of a message template

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListNotificationTemplateRequest()
        request.domain_id = "{domain_id}"
        request.body = PreviewTemplateBody(
            source="LTS",
            language="en-us",
            templates="Severity: ${event_severity};
Occurred: ${starts_at};
Alarm source: $event.metadata.resource_provider;
Resource type: $event.metadata.resource_type;
Resource ID: ${resources};
Statistical type: by keyword;
Expression: $event.annotations.condition_expression;
Current value: $event.annotations.current_value;
Statistical period: $event.annotations.frequency;
Query time: $event.annotations.results[0].time;
Query log: $event.annotations.results[0].raw_results;"
        )
        response = client.list_notification_template(request)
        print(response)
```



```
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Previewing the email format of a message template

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListNotificationTemplateRequest{}
    request.DomainId = "{domain_id}"
    request.Body = &model.PreviewTemplateBody{
        Source: "LTS",
        Language: model.GetPreviewTemplateBodyLanguageEnum().EN_US,
        Templates: "Severity: ${event_severity};
        Occurred: ${starts_at};
        Alarm source: $event.metadata.resource_provider;
        Resource type: $event.metadata.resource_type;
        Resource ID: ${resources};
        Statistical type: by keyword;
        Expression: $event.annotations.condition_expression;
        Current value: $event.annotations.current_value;
        Statistical period: $event.annotations.frequency;
        Query time: $event.annotations.results[0].time;
        Query log: $event.annotations.results[0].raw_results;"
    }
    response, err := client.ListNotificationTemplate(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.

## Error Codes

See [Error Codes](#).

# 6.12 SQL Alarm Rules

## 6.12.1 Creating a SQL Alarm Rule

### Function

This API is used to create a SQL alarm. Currently, each account can create a maximum of 200 keyword alarms and SQL alarms.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/lts/alarms/sql-alarm-rule

**Table 6-525** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-526** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-527** Request body parameters

Parameter	Mandatory	Type	Description
sql_alarm_rule_name	Yes	String	SQL alarm name. Minimum: <b>1</b> Maximum: <b>64</b>
is_css_sql	No	Boolean	Whether to use the SQL query with the pipe character. Default: <b>false</b>
sql_alarm_rule_description	No	String	SQL alarm description. Minimum: <b>0</b> Maximum: <b>64</b>
sql_requests	Yes	Array of <a href="#">SqlRequest</a> objects	SQL details.
frequency	Yes	<a href="#">CreateSqlAlarmRuleFrequency</a> object	Alarm statistical period.
condition_expression	Yes	String	Condition expression. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
sql_alarm_level	Yes	String	Alarm Severity Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>Critical</b></li> </ul>
sql_alarm_send	Yes	Boolean	Whether to send an alarm.
domain_id	Yes	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>
notification_save_rule	No	<a href="#">SqlNotificationSaveRule</a> object	Topic
trigger_condition_count	No	Integer	Number of times that log events meet the trigger condition. The default value is <b>1</b> .
trigger_condition_frequency	No	Integer	Number of queries in which the triggering condition is met. The default value is <b>1</b> .
whether_recover_policy	No	Boolean	Whether to enable the alarm clearance notification. The default value is <b>false</b> .
recovery_policy	No	Integer	Number of queries in which the triggering condition is not met. The alarm is cleared when this number reaches the value ( <b>3</b> by default) of this parameter.

Parameter	Mandatory	Type	Description
notification_frequency	Yes	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 5</li> <li>• 10</li> <li>• 15</li> <li>• 30</li> <li>• 60</li> <li>• 180</li> <li>• 360</li> </ul>
alarm_action_rule_name	No	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-528** SqlRequest

Parameter	Mandatory	Type	Description
is_time_range_relative	No	Boolean	The time range is relative.
log_stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	No	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	No	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
sql	Yes	String	SQL statement. Minimum: <b>1</b> Maximum: <b>1024</b>
sql_request_title	Yes	String	Chart name. Minimum: <b>1</b> Maximum: <b>64</b>
search_time_range	Yes	Integer	Time range for querying the latest data when a task is executed. If <b>search_time_range_unit</b> is set to <b>minute</b> , the maximum value is <b>60</b> . If <b>search_time_range_unit</b> is set to <b>hour</b> , the maximum value is <b>24</b> . Minimum: <b>1</b> Maximum: <b>60</b>
search_time_range_unit	Yes	String	Query time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-529** CreateSqlAlarmRuleFrequency

Parameter	Mandatory	Type	Description
type	Yes	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>
cron_expr	No	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
hour_of_day	No	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> . <b>DAILY</b> ranges from 0 to 23. <b>WEEKLY</b> ranges from 0 to 23.
day_of_week	No	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday).
fixed_rate	No	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the maximum value is 24. Minimum: <b>1</b> Maximum: <b>60</b>
fixed_rate_unit	No	String	Time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-530** SqlNotificationSaveRule

Parameter	Mandatory	Type	Description
language	Yes	String	Language of the preference. Minimum: <b>0</b> Maximum: <b>10</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
timezone	No	String	Time zone of the preference. Minimum: <b>0</b> Maximum: <b>1024</b>
user_name	Yes	String	Username. Minimum: <b>1</b> Maximum: <b>1024</b>
topics	Yes	Array of <b>Topics</b> objects	Topic information.

Parameter	Mandatory	Type	Description
template_name	Yes	String	Message template name.

**Table 6-531** Topics

Parameter	Mandatory	Type	Description
name	Yes	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>
display_name	No	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	No	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

## Response Parameters

**Status code: 200**

**Table 6-532** Response body parameters

Parameter	Type	Description
sql_alarm_rule_id	String	Alarm rule ID. Minimum: <b>36</b> Maximum: <b>36</b>

**Status code: 400**



**Table 6-533** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 500**

**Table 6-534** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

### Creating a SQL alarm rule

POST https://{endpoint}/v2/{project\_id}/lts/alarms/sql-alarm-rule

```
{
  "sql_alarm_rule_name": "huawei",
  "is_css_sql": false,
  "sql_alarm_rule_description": "huawei",
  "sql_requests": [ {
    "log_stream_id": "1",
    "log_group_id": "1",
    "sql": "select count(*) as t",
    "sql_request_title": "demo",
    "search_time_range": 10,
    "search_time_range_unit": "minute"
  } ],
  "frequency": {
    "type": "FIXED_RATE",
    "cron_expr": "",
    "hour_of_day": 0,
    "day_of_week": 0,
    "fixed_rate": 10,
    "fixed_rate_unit": "minute"
  },
  "condition_expression": "t>0",
  "sql_alarm_level": "Critical",
  "sql_alarm_send": true,
  "domain_id": "",
  "notification_frequency": 30,
  "alarm_action_rule_name": "",
  "notification_save_rule": {
    "language": "zh-cn",
    "timezone": "Asia/Shanghai",
```

```
"user_name" : "huawei",
"template_name" : "Message template name.",
"topics" : [ {
  "name" : "huawei",
  "topic_urn" : "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
  "display_name" : "",
  "push_policy" : 0
} ]
}
```

## Example Responses

### Status code: 200

The request is successful.

```
{
  "sql_alarm_rule_id" : ""
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2005",
  "error_msg" : "Alarm rule params validator error."
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2001",
  "error_msg" : "Failed to create alarm rule."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a SQL alarm rule

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateSqlAlarmRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

```
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
CreateSqlAlarmRuleRequest request = new CreateSqlAlarmRuleRequest();
CreateSqlAlarmRuleRequestBody body = new CreateSqlAlarmRuleRequestBody();
List<Topics> listNotificationSaveRuleTopics = new ArrayList<>();
listNotificationSaveRuleTopics.add(
    new Topics()
        .withName("huawei")
        .withTopicUrn("urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei")
        .withDisplayName("")
        .withPushPolicy(0)
);
SqlNotificationSaveRule notificationSaveRulebody = new SqlNotificationSaveRule();
notificationSaveRulebody.withLanguage(SqlNotificationSaveRule.LanguageEnum.fromValue("zh-cn"))
    .withTimezone("Asia/Shanghai")
    .withUserName("huawei")
    .withTopics(listNotificationSaveRuleTopics)
    .withTemplateName("Message template name.");
CreateSqlAlarmRuleFrequency frequencybody = new CreateSqlAlarmRuleFrequency();
frequencybody.withType(CreateSqlAlarmRuleFrequency.TypeEnum.fromValue("FIXED_RATE"))
    .withCronExpr("")
    .withHourOfDay(0)
    .withDayOfWeek(0)
    .withFixedRate(10)
    .withFixedRateUnit(CreateSqlAlarmRuleFrequency.FixedRateUnitEnum.fromValue("minute"));
List<SqlRequest> listbodySqlRequests = new ArrayList<>();
listbodySqlRequests.add(
    new SqlRequest()
        .withLogStreamId("1")
        .withLogGroupId("1")
        .withSql("select count(*) as t")
        .withSqlRequestTitle("demo")
        .withSearchTimeRange(10)
        .withSearchTimeRangeUnit(SqlRequest.SearchTimeRangeUnitEnum.fromValue("minute"))
);
body.withAlarmActionRuleName("");

body.withNotificationFrequency(CreateSqlAlarmRuleRequestBody.NotificationFrequencyEnum.NUMBER_30);
body.withNotificationSaveRule(notificationSaveRulebody);
body.withDomainId("");
body.withSqlAlarmSend(true);
body.withSqlAlarmLevel(CreateSqlAlarmRuleRequestBody.SqlAlarmLevelEnum.fromValue("Critical"));
body.withConditionExpression(">0");
body.withFrequency(frequencybody);
body.withSqlRequests(listbodySqlRequests);
body.withSqlAlarmRuleDescription("huawei");
body.withIsCssSql(false);
body.withSqlAlarmRuleName("huawei");
request.withBody(body);
try {
    CreateSqlAlarmRuleResponse response = client.createSqlAlarmRule(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
}
```

```
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Creating a SQL alarm rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateSqlAlarmRuleRequest()
        listTopicsNotificationSaveRule = [
            Topics(
                name="huawei",
                topic_urn="urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
                display_name="",
                push_policy=0
            )
        ]
        notificationSaveRulebody = SqlNotificationSaveRule(
            language="zh-cn",
            timezone="Asia/Shanghai",
            user_name="huawei",
            topics=listTopicsNotificationSaveRule,
            template_name="Message template name."
        )
        frequencybody = CreateSqlAlarmRuleFrequency(
            type="FIXED_RATE",
            cron_expr="",
            hour_of_day=0,
            day_of_week=0,
            fixed_rate=10,
            fixed_rate_unit="minute"
        )
        listSqlRequestsbody = [
            SqlRequest(
                log_stream_id="1",
```

```
        log_group_id="1",
        sql="select count(*) as t",
        sql_request_title="demo",
        search_time_range=10,
        search_time_range_unit="minute"
    )
]
request.body = CreateSqlAlarmRuleRequestBody(
    alarm_action_rule_name="",
    notification_frequency=30,
    notification_save_rule=notificationSaveRulebody,
    domain_id="",
    sql_alarm_send=True,
    sql_alarm_level="Critical",
    condition_expression="t>0",
    frequency=frequencybody,
    sql_requests=listSqlRequestsbody,
    sql_alarm_rule_description="huawei",
    is_css_sql=False,
    sql_alarm_rule_name="huawei"
)
response = client.create_sql_alarm_rule(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Creating a SQL alarm rule

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateSqlAlarmRuleRequest{
        displayNameTopics:= ""
        pushPolicyTopics:= int32(0)
        var listTopicsNotificationSaveRule = []model.Topics{
```

```
{
  Name: "huawei",
  TopicUrn: "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
  DisplayName: &displayNameTopics,
  PushPolicy: &pushPolicyTopics,
},
}
timezoneNotificationSaveRule:= "Asia/Shanghai"
notificationSaveRulebody := &model.SqlNotificationSaveRule{
  Language: model.GetSqlNotificationSaveRuleLanguageEnum().ZH_CN,
  Timezone: &timezoneNotificationSaveRule,
  UserName: "huawei",
  Topics: listTopicsNotificationSaveRule,
  TemplateName: "Message template name.",
}
cronExprFrequency:= ""
hourOfDayFrequency:= int32(0)
dayOfWeekFrequency:= int32(0)
fixedRateFrequency:= int32(10)
fixedRateUnitFrequency:= model.GetCreateSqlAlarmRuleFrequencyFixedRateUnitEnum().MINUTE
frequencybody := &model.CreateSqlAlarmRuleFrequency{
  Type: model.GetCreateSqlAlarmRuleFrequencyTypeEnum().FIXED_RATE,
  CronExpr: &cronExprFrequency,
  HourOfDay: &hourOfDayFrequency,
  DayOfWeek: &dayOfWeekFrequency,
  FixedRate: &fixedRateFrequency,
  FixedRateUnit: &fixedRateUnitFrequency,
}
var listSqlRequestsbody = []model.SqlRequest{
  {
    LogStreamId: "1",
    LogGroupid: "1",
    Sql: "select count(*) as t",
    SqlRequestTitle: "demo",
    SearchTimeRange: int32(10),
    SearchTimeRangeUnit: model.GetSqlRequestSearchTimeRangeUnitEnum().MINUTE,
  },
}
alarmActionRuleNameCreateSqlAlarmRuleRequestBody:= ""
sqlAlarmRuleDescriptionCreateSqlAlarmRuleRequestBody:= "huawei"
isCssSqlCreateSqlAlarmRuleRequestBody:= false
request.Body = &model.CreateSqlAlarmRuleRequestBody{
  AlarmActionRuleName: &alarmActionRuleNameCreateSqlAlarmRuleRequestBody,
  NotificationFrequency: model.GetCreateSqlAlarmRuleRequestBodyNotificationFrequencyEnum().E_30,
  NotificationSaveRule: notificationSaveRulebody,
  DomainId: "",
  SqlAlarmSend: true,
  SqlAlarmLevel: model.GetCreateSqlAlarmRuleRequestBodySqlAlarmLevelEnum().CRITICAL,
  ConditionExpression: "t>0",
  Frequency: frequencybody,
  SqlRequests: listSqlRequestsbody,
  SqlAlarmRuleDescription: &sqlAlarmRuleDescriptionCreateSqlAlarmRuleRequestBody,
  IsCssSql: &isCssSqlCreateSqlAlarmRuleRequestBody,
  SqlAlarmRuleName: "huawei",
}
response, err := client.CreateSqlAlarmRule(request)
if err == nil {
  fmt.Printf("%+v\n", response)
} else {
  fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.12.2 Modifying a SQL Alarm Rule

### Function

This API is used to modify a SQL alarm.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/{project\_id}/lts/alarms/sql-alarm-rule

**Table 6-535** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-536** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-537** Request body parameters

Parameter	Mandatory	Type	Description
sql_alarm_rule_id	Yes	String	SQL alarm ID. Minimum: <b>36</b> Maximum: <b>36</b>
sql_alarm_rule_name	Yes	String	Original rule name, which cannot be changed. Minimum: <b>1</b> Maximum: <b>64</b>
alarm_rule_alias	No	String	Rule name. Minimum: <b>1</b> Maximum: <b>64</b>
is_css_sql	No	Boolean	Whether to use the SQL query with the pipe character. Default: <b>false</b>
sql_alarm_rule_description	No	String	SQL alarm description. Minimum: <b>0</b> Maximum: <b>64</b>
sql_requests	Yes	Array of <a href="#">SqlRequest</a> objects	SQL details.



Parameter	Mandatory	Type	Description
frequency	Yes	<a href="#">CreateSqlAlarmRuleFrequency</a> object	Alarm statistical period.
condition_expression	Yes	String	Condition expression. Minimum: <b>1</b> Maximum: <b>2048</b>
sql_alarm_level	Yes	String	Alarm severity. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>Critical</b></li> </ul>
sql_alarm_send	Yes	Boolean	Whether to send an alarm.
sql_alarm_send_code	Yes	Integer	Subject. <b>0</b> : unchanged; <b>1</b> : added; <b>2</b> : modified; <b>3</b> : deleted. Minimum: <b>0</b> Maximum: <b>3</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>0</b></li> <li>• <b>1</b></li> <li>• <b>2</b></li> <li>• <b>3</b></li> </ul>
domain_id	Yes	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>
notification_save_rule	No	<a href="#">SqlNotificationSaveRule</a> object	Topic
trigger_condition_count	No	Integer	Number of times that log events meet the trigger condition. The default value is <b>1</b> .
trigger_condition_frequency	No	Integer	Number of queries in which the triggering condition is met. The default value is <b>1</b> .
whether_recover_policy	No	Boolean	Whether to enable the alarm clearance notification. The default value is <b>false</b> .

Parameter	Mandatory	Type	Description
recovery_policy	No	Integer	Number of queries in which the triggering condition is not met. The alarm is cleared when this number reaches the value ( <b>3</b> by default) of this parameter.
notification_frequency	Yes	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• <b>0</b></li> <li>• <b>5</b></li> <li>• <b>10</b></li> <li>• <b>15</b></li> <li>• <b>30</b></li> <li>• <b>60</b></li> <li>• <b>180</b></li> <li>• <b>360</b></li> </ul>
alarm_action_rule_name	No	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-538** SqlRequest

Parameter	Mandatory	Type	Description
is_time_range_relative	No	Boolean	The time range is relative.
log_stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	No	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Mandatory	Type	Description
log_group_name	No	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
sql	Yes	String	SQL statement. Minimum: <b>1</b> Maximum: <b>1024</b>
sql_request_title	Yes	String	Chart name. Minimum: <b>1</b> Maximum: <b>64</b>
search_time_range	Yes	Integer	Time range for querying the latest data when a task is executed. If <b>search_time_range_unit</b> is set to <b>minute</b> , the maximum value is <b>60</b> . If <b>search_time_range_unit</b> is set to <b>hour</b> , the maximum value is <b>24</b> . Minimum: <b>1</b> Maximum: <b>60</b>
search_time_range_unit	Yes	String	Query time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-539** CreateSqlAlarmRuleFrequency

Parameter	Mandatory	Type	Description
type	Yes	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>

Parameter	Mandatory	Type	Description
cron_expr	No	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>
hour_of_day	No	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> . <b>DAILY</b> ranges from 0 to 23. <b>WEEKLY</b> ranges from 0 to 23.
day_of_week	No	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday).
fixed_rate	No	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the maximum value is 24. Minimum: <b>1</b> Maximum: <b>60</b>
fixed_rate_unit	No	String	Time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-540** SqlNotificationSaveRule

Parameter	Mandatory	Type	Description
language	Yes	String	Language of the preference. Minimum: <b>0</b> Maximum: <b>10</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
timezone	No	String	Time zone of the preference. Minimum: <b>0</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
user_name	Yes	String	Username. Minimum: <b>1</b> Maximum: <b>1024</b>
topics	Yes	Array of <b>Topics</b> objects	Topic information.
template_name	Yes	String	Message template name.

**Table 6-541** Topics

Parameter	Mandatory	Type	Description
name	Yes	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>
display_name	No	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	No	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

## Response Parameters

Status code: 200

**Table 6-542** Response body parameters

Parameter	Type	Description
sql_alarm_rule_name	String	Original rule name.
alarm_rule_alias	String	Rule name. Minimum: <b>1</b> Maximum: <b>64</b>
is_css_sql	Boolean	Whether to use the SQL query with the pipe character. Default: <b>false</b>
indexId	String	Index ID.
projectId	String	Project ID.
sql_alarm_rule_id	String	SQL alarm rule ID. Minimum: <b>36</b> Maximum: <b>36</b>
sql_alarm_rule_description	String	SQL alarm description. Minimum: <b>0</b> Maximum: <b>64</b>
sql_requests	Array of <a href="#">SqlRequest</a> objects	SQL details.
frequency	<a href="#">FrequencyResponseBody</a> object	Alarm statistical period.
condition_expression	String	Condition expression. Minimum: <b>1</b> Maximum: <b>1024</b>
sql_alarm_level	String	Alarm Severity Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>CRITICAL</b></li> </ul>
sql_alarm_send	Boolean	Whether to send an alarm.
domain_id	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>

Parameter	Type	Description
create_time	Long	Creation time, which is a timestamp in milliseconds Minimum: <b>13</b> Maximum: <b>13</b>
update_time	Long	Update time (timestamp in milliseconds). Minimum: <b>13</b> Maximum: <b>13</b>
topics	Array of <b>Topics</b> objects	Themes
language	String	Language of information added to emails. Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
id	String	Rule ID.
notification_frequency	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• <b>0</b></li> <li>• <b>5</b></li> <li>• <b>10</b></li> <li>• <b>15</b></li> <li>• <b>30</b></li> <li>• <b>60</b></li> <li>• <b>180</b></li> <li>• <b>360</b></li> </ul>
alarm_action_rule_name	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-543** SqlRequest

Parameter	Type	Description
is_time_range_relative	Boolean	The time range is relative.

Parameter	Type	Description
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
sql	String	SQL statement. Minimum: <b>1</b> Maximum: <b>1024</b>
sql_request_title	String	Chart name. Minimum: <b>1</b> Maximum: <b>64</b>
search_time_range	Integer	Time range for querying the latest data when a task is executed. If <b>search_time_range_unit</b> is set to <b>minute</b> , the maximum value is <b>60</b> . If <b>search_time_range_unit</b> is set to <b>hour</b> , the maximum value is <b>24</b> . Minimum: <b>1</b> Maximum: <b>60</b>
search_time_range_unit	String	Query time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>



**Table 6-544** FrequencyRespBody

Parameter	Type	Description
type	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>
cron_expr	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>
hour_of_day	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> .
day_of_week	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday).
fixed_rate	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the maximum value is 24.
fixed_rate_unit	String	Enumerated values of the time unit: Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-545** Topics

Parameter	Type	Description
name	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Type	Description
display_name	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

**Status code: 400**

**Table 6-546** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-547** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

### Modifying a SQL alarm rule

```
PUT https://{endpoint}/v2/{project_id}/lts/alarms/sql-alarm-rule
```

```
{
  "sql_alarm_rule_id" : "",
  "sql_alarm_rule_name" : "huawei",
  "is_css_sql" : false,
  "alarm_rule_alias" : "zhangsan",
  "sql_alarm_rule_description" : "huawei",
```

```
"sql_requests" : [ {
  "log_stream_id" : "1",
  "log_group_id" : "1",
  "sql" : "select count(*) as t",
  "sql_request_title" : "demo",
  "search_time_range" : 10,
  "search_time_range_unit" : "minute"
} ],
"frequency" : {
  "type" : "FIXED_RATE",
  "cron_expr" : "",
  "hour_of_day" : 0,
  "day_of_week" : 0,
  "fixed_rate" : 10,
  "fixed_rate_unit" : "minute"
},
"condition_expression" : "t>0",
"sql_alarm_level" : "Critical",
"sql_alarm_send" : true,
"sql_alarm_send_code" : 0,
"domain_id" : "",
"notification_frequency" : 5,
"alarm_action_rule_name" : "",
"notification_save_rule" : {
  "language" : "zh-cn",
  "timezone" : "Asia/Shanghai",
  "user_name" : "huawei",
  "template_name" : "Message template name.",
  "topics" : [ {
    "name" : "huawei",
    "topic_urn" : "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
    "display_name" : "",
    "push_policy" : 0
  } ]
}
}
```

## Example Responses

### Status code: 200

The request is successful.

```
{
  "sql_alarm_rule_id" : "",
  "sql_alarm_rule_name" : "huawei",
  "alarm_rule_alias" : "zhangsan",
  "is_css_sql" : false,
  "sql_alarm_rule_description" : "huawei",
  "sql_requests" : [ {
    "log_stream_id" : "1",
    "log_stream_name" : "huawei",
    "log_group_name" : "huawei",
    "log_group_id" : "1",
    "sql" : "select count(*) as t",
    "sql_request_title" : "demo",
    "search_time_range" : 10,
    "search_time_range_unit" : "minute"
  } ],
  "frequency" : {
    "type" : "FIXED_RATE",
    "cron_expr" : "",
    "hour_of_day" : 0,
    "day_of_week" : 0,
    "fixed_rate" : 10,
    "fixed_rate_unit" : "minute"
  },
  "condition_expression" : "t>0",
  "sql_alarm_level" : "Critical",
```

```
"sql_alarm_send" : true,
"domain_id" : "",
"notification_frequency" : 5,
"alarm_action_rule_name" : "",
"topics" : [ {
  "name" : "huawei",
  "topic_urn" : "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
  "display_name" : "",
  "push_policy" : 0
} ]
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2005",
  "error_msg" : "Alarm rule params validator error."
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2003",
  "error_msg" : "Failed to update alarm rule."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Modifying a SQL alarm rule

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateSqlAlarmRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
```

```
.withAk(ak)
.withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateSqlAlarmRuleRequest request = new UpdateSqlAlarmRuleRequest();
UpdateSqlAlarmRuleRequestBody body = new UpdateSqlAlarmRuleRequestBody();
List<Topics> listNotificationSaveRuleTopics = new ArrayList<>();
listNotificationSaveRuleTopics.add(
    new Topics()
        .withName("huawei")
        .withTopicUrn("urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei")
        .withDisplayName("")
        .withPushPolicy(0)
);
SqlNotificationSaveRule notificationSaveRulebody = new SqlNotificationSaveRule();
notificationSaveRulebody.withLanguage(SqlNotificationSaveRule.LanguageEnum.fromValue("zh-cn"))
    .withTimezone("Asia/Shanghai")
    .withUserName("huawei")
    .withTopics(listNotificationSaveRuleTopics)
    .withTemplateName("Message template name.");
CreateSqlAlarmRuleFrequency frequencybody = new CreateSqlAlarmRuleFrequency();
frequencybody.withType(CreateSqlAlarmRuleFrequency.TypeEnum.fromValue("FIXED_RATE"))
    .withCronExpr("")
    .withHourOfDay(0)
    .withDayOfWeek(0)
    .withFixedRate(10)
    .withFixedRateUnit(CreateSqlAlarmRuleFrequency.FixedRateUnitEnum.fromValue("minute"));
List<SqlRequest> listbodySqlRequests = new ArrayList<>();
listbodySqlRequests.add(
    new SqlRequest()
        .withLogStreamId("1")
        .withLogGroupId("1")
        .withSql("select count(*) as t")
        .withSqlRequestTitle("demo")
        .withSearchTimeRange(10)
        .withSearchTimeRangeUnit(SqlRequest.SearchTimeRangeUnitEnum.fromValue("minute"))
);
body.withAlarmActionRuleName("");

body.withNotificationFrequency(UpdateSqlAlarmRuleRequestBody.NotificationFrequencyEnum.NUMBER_5);
body.withNotificationSaveRule(notificationSaveRulebody);
body.withDomainId("");
body.withSqlAlarmSendCode(UpdateSqlAlarmRuleRequestBody.SqlAlarmSendCodeEnum.NUMBER_0);
body.withSqlAlarmSend(true);
body.withSqlAlarmLevel(UpdateSqlAlarmRuleRequestBody.SqlAlarmLevelEnum.fromValue("Critical"));
body.withConditionExpression("t>0");
body.withFrequency(frequencybody);
body.withSqlRequests(listbodySqlRequests);
body.withSqlAlarmRuleDescription("huawei");
body.withIsCssSql(false);
body.withAlarmRuleAlias("zhangsan");
body.withSqlAlarmRuleName("huawei");
body.withSqlAlarmRuleId("");
request.withBody(body);
try {
    UpdateSqlAlarmRuleResponse response = client.updateSqlAlarmRule(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
```

```
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Modifying a SQL alarm rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateSqlAlarmRuleRequest()
        listTopicsNotificationSaveRule = [
            Topics(
                name="huawei",
                topic_urn="urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
                display_name="",
                push_policy=0
            )
        ]
        notificationSaveRulebody = SqlNotificationSaveRule(
            language="zh-cn",
            timezone="Asia/Shanghai",
            user_name="huawei",
            topics=listTopicsNotificationSaveRule,
            template_name="Message template name."
        )
        frequencybody = CreateSqlAlarmRuleFrequency(
            type="FIXED_RATE",
            cron_expr="",
            hour_of_day=0,
            day_of_week=0,
            fixed_rate=10,
            fixed_rate_unit="minute"
        )
        listSqlRequestsbody = [
            SqlRequest(
                log_stream_id="1",
                log_group_id="1",
                sql="select count(*) as t",
                sql_request_title="demo",
                search_time_range=10,
                search_time_range_unit="minute"
            )
        ]
    ]
```

```
request.body = UpdateSqlAlarmRuleRequestBody(  
    alarm_action_rule_name="",  
    notification_frequency=5,  
    notification_save_rule=notificationSaveRulebody,  
    domain_id="",  
    sql_alarm_send_code=0,  
    sql_alarm_send=True,  
    sql_alarm_level="Critical",  
    condition_expression="t>0",  
    frequency=frequencybody,  
    sql_requests=listSqlRequestsbody,  
    sql_alarm_rule_description="huawei",  
    is_css_sql=False,  
    alarm_rule_alias="zhangsan",  
    sql_alarm_rule_name="huawei",  
    sql_alarm_rule_id=""  
)  
response = client.update_sql_alarm_rule(request)  
print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

## Go

### Modifying a SQL alarm rule

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := lts.NewLtsClient(  
        lts.LtsClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.UpdateSqlAlarmRuleRequest{  
        displayNameTopics:= ""  
        pushPolicyTopics:= int32(0)  
        var listTopicsNotificationSaveRule = []model.Topics{  
            {  
                Name: "huawei",  
                TopicUrn: "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",  
                DisplayName: &displayNameTopics,  
            }  
        }  
    }  
}
```

```
        PushPolicy: &pushPolicyTopics,
    },
}
timezoneNotificationSaveRule:= "Asia/Shanghai"
notificationSaveRulebody := &model.SqlNotificationSaveRule{
    Language: model.GetSqlNotificationSaveRuleLanguageEnum().ZH_CN,
    Timezone: &timezoneNotificationSaveRule,
    UserName: "huawei",
    Topics: listTopicsNotificationSaveRule,
    TemplateName: "Message template name.",
}
cronExprFrequency:= ""
hourOfDayFrequency:= int32(0)
dayOfWeekFrequency:= int32(0)
fixedRateFrequency:= int32(10)
fixedRateUnitFrequency:= model.GetCreateSqlAlarmRuleFrequencyFixedRateUnitEnum().MINUTE
frequencybody := &model.CreateSqlAlarmRuleFrequency{
    Type: model.GetCreateSqlAlarmRuleFrequencyTypeEnum().FIXED_RATE,
    CronExpr: &cronExprFrequency,
    HourOfDay: &hourOfDayFrequency,
    DayOfWeek: &dayOfWeekFrequency,
    FixedRate: &fixedRateFrequency,
    FixedRateUnit: &fixedRateUnitFrequency,
}
var listSqlRequestsbody = []model.SqlRequest{
    {
        LogStreamId: "1",
        LogGroupId: "1",
        Sql: "select count(*) as t",
        SqlRequestTitle: "demo",
        SearchTimeRange: int32(10),
        SearchTimeRangeUnit: model.GetSqlRequestSearchTimeRangeUnitEnum().MINUTE,
    },
}
alarmActionRuleNameUpdateSqlAlarmRuleRequestBody:= ""
sqlAlarmRuleDescriptionUpdateSqlAlarmRuleRequestBody:= "huawei"
isCssSqlUpdateSqlAlarmRuleRequestBody:= false
alarmRuleAliasUpdateSqlAlarmRuleRequestBody:= "zhangan"
request.Body = &model.UpdateSqlAlarmRuleRequestBody{
    AlarmActionRuleName: &alarmActionRuleNameUpdateSqlAlarmRuleRequestBody,
    NotificationFrequency: model.GetUpdateSqlAlarmRuleRequestBodyNotificationFrequencyEnum().E_5,
    NotificationSaveRule: notificationSaveRulebody,
    DomainId: "",
    SqlAlarmSendCode: model.GetUpdateSqlAlarmRuleRequestBodySqlAlarmSendCodeEnum().E_0,
    SqlAlarmSend: true,
    SqlAlarmLevel: model.GetUpdateSqlAlarmRuleRequestBodySqlAlarmLevelEnum().CRITICAL,
    ConditionExpression: ">0",
    Frequency: frequencybody,
    SqlRequests: listSqlRequestsbody,
    SqlAlarmRuleDescription: &sqlAlarmRuleDescriptionUpdateSqlAlarmRuleRequestBody,
    IsCssSql: &isCssSqlUpdateSqlAlarmRuleRequestBody,
    AlarmRuleAlias: &alarmRuleAliasUpdateSqlAlarmRuleRequestBody,
    SqlAlarmRuleName: "huawei",
    SqlAlarmRuleId: "",
}
response, err := client.UpdateSqlAlarmRule(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.



## Status Codes

Status Code	Description
200	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

### 6.12.3 Querying SQL Alarm Rules

#### Function

This API is used to query a SQL alarm.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2/{project\_id}/lts/alarms/sql-alarm-rule

**Table 6-548** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

## Request Parameters

**Table 6-549** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-550** Response body parameters

Parameter	Type	Description
sql_alarm_rules	Array of <a href="#">SqlAlarmRuleRespList</a> objects	SQL alarms.

**Table 6-551** SqlAlarmRuleRespList

Parameter	Type	Description
sql_alarm_rule_name	String	SQL alarm name. Minimum: <b>1</b> Maximum: <b>64</b>
is_css_sql	Boolean	Whether to use the SQL query with the pipe character. Default: <b>false</b>
sql_alarm_rule_id	String	SQL alarm rule ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
sql_alarm_rule_description	String	SQL alarm description. Minimum: <b>0</b> Maximum: <b>64</b>
sql_requests	Array of <b>SqlRequest</b> objects	SQL details.
frequency	<b>FrequencyRespBody</b> object	Alarm statistical period.
condition_expression	String	Condition expression. Minimum: <b>1</b> Maximum: <b>1024</b>
topics	Array of <b>Topics</b> objects	Topic information.
sql_alarm_level	String	Alarm severity. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>Critical</b></li> </ul>
sql_alarm_send	Boolean	Whether to send an alarm.
domain_id	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>
create_time	Long	Creation time (timestamp in milliseconds). Minimum: <b>13</b> Maximum: <b>13</b>
update_time	Long	Update time (timestamp in milliseconds). Minimum: <b>13</b> Maximum: <b>13</b>
template_name	String	Message template name.
status	String	Alarm status. Enumeration values: <ul style="list-style-type: none"> <li>• <b>RUNNING: enabled</b></li> <li>• <b>STOPPING: disabled</b></li> </ul>

Parameter	Type	Description
trigger_condition_count	Integer	Number of queries in which the triggering condition is met. The default value is <b>1</b> .
trigger_condition_frequency	Integer	Number of queries in which the triggering condition is met. The default value is <b>1</b> .
whether_recovery_policy	Boolean	Whether to enable the alarm clearance notification. The default value is <b>false</b> .
recovery_policy	Integer	Number of queries in which the triggering condition is not met. The alarm is cleared when this number reaches the value ( <b>3</b> by default) of this parameter.
notification_frequency	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• <b>0</b></li> <li>• <b>5</b></li> <li>• <b>10</b></li> <li>• <b>15</b></li> <li>• <b>30</b></li> <li>• <b>60</b></li> <li>• <b>180</b></li> <li>• <b>360</b></li> </ul>
alarm_action_rule_name	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-552** SqlRequest

Parameter	Type	Description
is_time_range_relative	Boolean	The time range is relative.
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
sql	String	SQL statement. Minimum: <b>1</b> Maximum: <b>1024</b>
sql_request_title	String	Chart name. Minimum: <b>1</b> Maximum: <b>64</b>
search_time_range	Integer	Time range for querying the latest data when a task is executed. If <b>search_time_range_unit</b> is set to <b>minute</b> , the maximum value is <b>60</b> . If <b>search_time_range_unit</b> is set to <b>hour</b> , the maximum value is <b>24</b> . Minimum: <b>1</b> Maximum: <b>60</b>
search_time_range_unit	String	Query time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-553** FrequencyRespBody

Parameter	Type	Description
type	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>
cron_expr	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>
hour_of_day	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> .
day_of_week	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday).
fixed_rate	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the maximum value is 24.
fixed_rate_unit	String	Enumerated values of the time unit: Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-554** Topics

Parameter	Type	Description
name	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Type	Description
display_name	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

**Status code: 500**

**Table 6-555** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Querying a SQL alarm rule

```
GET https://{endpoint}/v2/{project_id}/lts/alarms/sql-alarm-rule
/v2/{project_id}/lts/alarms/sql-alarm-rule
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "sql_alarm_rules" : [ {
    "sql_alarm_rule_name" : "string",
    "is_css_sql" : false,
    "sql_alarm_rule_id" : "string",
    "sql_alarm_rule_description" : "string",
    "sql_requests" : [ {
      "log_stream_id" : "string",
      "log_stream_name" : "string",
      "log_group_id" : "string",
      "log_group_name" : "string",
      "sql" : "string",
      "sql_request_title" : "string",
      "search_time_range" : 0,
      "search_time_range_unit" : "minute"
    } ],
  } ],
}
```

```

"frequency" : {
  "type" : "CRON",
  "cron_expr" : "string",
  "hour_of_day" : 0,
  "day_of_week" : 0,
  "fixed_rate" : 0,
  "fixed_rate_unit" : "minute"
},
"condition_expression" : "string",
"topics" : [{
  "name" : "string",
  "topic_urn" : "string",
  "display_name" : "string",
  "push_policy" : 0
}],
"sql_alarm_level" : "Info",
"sql_alarm_send" : true,
"domain_id" : "string",
"create_time" : 0,
"update_time" : 0,
"template_name" : "Message template name.",
"status" : "RUNNING",
"trigger_condition_count" : "1",
"trigger_condition_frequency" : "1",
"whether_recovery_policy" : false,
"recovery_policy" : "3",
"notification_frequency" : 5,
"alarm_action_rule_name" : ""
}]
}

```

**Status code: 500**

The server has received the request but encountered an internal error.

```

{
  "error_code" : "LTS.2008",
  "error_msg" : "Find Alarm rule failed."
}

```

**Status Codes**

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

**Error Codes**

See [Error Codes](#).

**6.12.4 Deleting a SQL Alarm Rule**

**Function**

This API is used to delete a SQL alarm.



## Calling Method

For details, see [Calling APIs](#).

## URI

DELETE /v2/{project\_id}/lts/alarms/sql-alarm-rule/{sql\_alarm\_rule\_id}

**Table 6-556** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
sql_alarm_rule_id	Yes	String	SQL alarm rule ID. Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-557** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: **500**

**Table 6-558** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

Delete a SQL alarm by alarm ID

```
POST https://{endpoint}/v2/{project_id}/lts/alarms/sql-alarm-rule/{sql_alarm_rule_id}
/v2/{project_id}/lts/alarms/sql-alarm-rule/{sql_alarm_rule_id}
```

## Example Responses

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2002",
  "error_msg" : "Failed to delete alarm rule."
}
```

## Status Codes

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.12.5 Switching the Alarm Rule Status

### Function

This API is used to start or stop an alarm rule.

### Calling Method

For details, see [Calling APIs](#).

## URI

PUT /v2/{project\_id}/lts/alarms/status

**Table 6-559** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-560** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-561** Request body parameters

Parameter	Mandatory	Type	Description
alarm_rule_id	Yes	String	Alarm rule ID. Minimum: <b>1</b> Maximum: <b>100</b>
type	Yes	String	Alarm rule types can be <b>sql</b> or <b>keywords</b> . Minimum: <b>1</b> Maximum: <b>100</b>

Parameter	Mandatory	Type	Description
status	Yes	String	RUNNING enables the alarm rule, and STOPPING disables the alarm rule. Minimum: <b>1</b> Maximum: <b>100</b> Enumeration values: <ul style="list-style-type: none"> <li>● <b>RUNNING</b></li> <li>● <b>STOPPING</b></li> </ul>

## Response Parameters

Status code: 401

Table 6-562 Response body parameters

Parameter	Type	Description
error_code	String	Error code example. Minimum: <b>10</b> Maximum: <b>10</b>
error_msg	String	Error message. Minimum: <b>1</b> Maximum: <b>1000</b>

Status code: 500

Table 6-563 Response body parameters

Parameter	Type	Description
error_code	String	Error code example. Minimum: <b>10</b> Maximum: <b>10</b>
error_msg	String	Error message. Minimum: <b>1</b> Maximum: <b>1000</b>

## Example Requests

- Enable an alarm rule with a specified alarm rule ID. The value of type is sql, and the value of status is RUNNING.

```
PUT https://{endpoint}/v2/{project_id}/lts/alarms/status
```

```
{
  "alarm_rule_id" : "ABCDEFGF",
  "type" : "sql",
  "status" : "RUNNING"
}
```

- The value of type is keywords, and the value of status is STOPPING.

```
PUT https://{endpoint}/v2/{project_id}/lts/alarms/status
```

```
{
  "alarm_rule_id" : "ABCDEFGF",
  "type" : "keywords",
  "status" : "STOPPING"
}
```

## Example Responses

### Status code: 401

Failed to verify the project ID.

```
{
  "error_code" : "LTS.0001",
  "error_msg" : "Project verify error."
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2021",
  "error_msg" : "Failed to update alarm rule status."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Enable an alarm rule with a specified alarm rule ID. The value of type is sql, and the value of status is RUNNING.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class UpdateAlarmRuleStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
```

```
environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateAlarmRuleStatusRequest request = new UpdateAlarmRuleStatusRequest();
ChangeAlarmRuleStatus body = new ChangeAlarmRuleStatus();
body.withType("sql");
body.withStatus("RUNNING");
body.withAlarmRuleId("ABCDEFGH");
request.withBody(body);
try {
    UpdateAlarmRuleStatusResponse response = client.updateAlarmRuleStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- The value of type is keywords, and the value of status is STOPPING.

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class UpdateAlarmRuleStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
```

```
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();
UpdateAlarmRuleStatusRequest request = new UpdateAlarmRuleStatusRequest();
ChangeAlarmRuleStatus body = new ChangeAlarmRuleStatus();
body.withType("keywords");
body.withStatus("STOPPING");
body.withAlarmRuleId("ABCDEFGF");
request.withBody(body);
try {
    UpdateAlarmRuleStatusResponse response = client.updateAlarmRuleStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

- Enable an alarm rule with a specified alarm rule ID. The value of type is sql, and the value of status is RUNNING.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAlarmRuleStatusRequest()
        request.body = ChangeAlarmRuleStatus(
            type="sql",
            status="RUNNING",
            alarm_rule_id="ABCDEFGF"
        )
        response = client.update_alarm_rule_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

- The value of type is keywords, and the value of status is STOPPING.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAlarmRuleStatusRequest()
        request.body = ChangeAlarmRuleStatus(
            type="keywords",
            status="STOPPING",
            alarm_rule_id="ABCDEFGF"
        )
        response = client.update_alarm_rule_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

- Enable an alarm rule with a specified alarm rule ID. The value of type is sql, and the value of status is RUNNING.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
```



```
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateAlarmRuleStatusRequest{}
request.Body = &model.ChangeAlarmRuleStatus{
    Type: "sql",
    Status: "RUNNING",
    AlarmRuleId: "ABCDEFGH",
}
response, err := client.UpdateAlarmRuleStatus(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- The value of type is keywords, and the value of status is STOPPING.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateAlarmRuleStatusRequest{}
    request.Body = &model.ChangeAlarmRuleStatus{
        Type: "keywords",
        Status: "STOPPING",
        AlarmRuleId: "ABCDEFGH",
    }
    response, err := client.UpdateAlarmRuleStatus(request)
    if err == nil {
```

```
    fmt.Printf("%+v\n", response)
  } else {
    fmt.Println(err)
  }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
401	Failed to verify the project ID.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.13 Keyword Alarm Rules

## 6.13.1 Creating a Keyword Alarm Rule

### Function

This API is used to create a keyword alarm. Currently, each account can create a maximum of 200 keyword alarms and SQL alarms.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/lts/alarms/keywords-alarm-rule

**Table 6-564** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-565** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-566** Request body parameters

Parameter	Mandatory	Type	Description
keywords_alarm_rule_name	Yes	String	Keyword alarm names. <b>NOTE</b> Cannot start with a period (.) or underscore (_) or end with a period (.) Minimum: <b>1</b> Maximum: <b>64</b>
keywords_alarm_rule_description	No	String	Keyword alarm description. Minimum: <b>0</b> Maximum: <b>64</b>

Parameter	Mandatory	Type	Description
keywords_requests	Yes	Array of <a href="#">KeywordsRequest</a> objects	Keyword details.
frequency	Yes	<a href="#">Frequency</a> object	Alarm statistical period.
keywords_alarm_level	Yes	String	Alarm severity. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>Critical</b></li> </ul>
keywords_alarm_send	Yes	Boolean	Whether to send an alarm.
domain_id	Yes	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>
notification_save_rule	No	<a href="#">SqlNotificationSaveRule</a> object	Topic
trigger_condition_count	No	Integer	Number of times that log events meet the trigger condition. The default value is <b>1</b> .
trigger_condition_frequency	No	Integer	Number of queries in which the triggering condition is met. The default value is <b>1</b> .
whether_recovery_policy	No	Boolean	Whether to enable the alarm clearance notification. The default value is <b>false</b> .
recovery_policy	No	Integer	Number of queries in which the triggering condition is not met. The alarm is cleared when this number reaches the value ( <b>3</b> by default) of this parameter.

Parameter	Mandatory	Type	Description
notification_frequency	Yes	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 5</li> <li>• 10</li> <li>• 15</li> <li>• 30</li> <li>• 60</li> <li>• 180</li> <li>• 360</li> </ul>
alarm_action_rule_name	No	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-567** KeywordsRequest

Parameter	Mandatory	Type	Description
log_stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	No	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	No	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
keywords	Yes	String	Keyword Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
condition	Yes	String	Condition Enumeration values: <ul style="list-style-type: none"> <li>• &gt;=</li> <li>• &lt;=</li> <li>• &lt;</li> <li>• &gt;</li> </ul>
number	Yes	Integer	Row Minimum: <b>1</b> Maximum: <b>2147483647</b>
search_time_range	Yes	Integer	Time range for querying the latest data when a task is executed. The maximum value is 60 and the minimum is 1 if the unit is minute. The maximum is 24 and the minimum is 1 if the unit is hour.
search_time_range_unit	Yes	String	Query time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> </ul>

**Table 6-568** Frequency

Parameter	Mandatory	Type	Description
type	Yes	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>
cron_expr	No	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
hour_of_day	No	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> . <b>DAILY</b> ranges from 0 to 23. <b>WEEKLY</b> ranges from 0 to 23.
day_of_week	No	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday). Minimum: <b>1</b> Maximum: <b>7</b>
fixed_rate	No	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the value ranges from 5 to 24. Minimum: <b>1</b> Maximum: <b>60</b>
fixed_rate_unit	No	String	Time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-569** SqlNotificationSaveRule

Parameter	Mandatory	Type	Description
language	Yes	String	Language of the preference. Minimum: <b>0</b> Maximum: <b>10</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
timezone	No	String	Time zone of the preference. Minimum: <b>0</b> Maximum: <b>1024</b>
user_name	Yes	String	Username. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
topics	Yes	Array of <b>Topics</b> objects	Topic information.
template_name	Yes	String	Message template name.

**Table 6-570** Topics

Parameter	Mandatory	Type	Description
name	Yes	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>
display_name	No	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	No	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

## Response Parameters

**Status code: 200**

**Table 6-571** Response body parameters

Parameter	Type	Description
keywords_alarm_rule_id	String	Alarm rule ID. Minimum: <b>36</b> Maximum: <b>36</b>



**Status code: 400**

**Table 6-572** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

**Status code: 500**

**Table 6-573** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

### Creating a keyword alarm rule

POST https://{endpoint}/v2/{project\_id}/lts/alarms/keywords-alarm-rule

```
{
  "keywords_alarm_rule_name": "huawei",
  "keywords_alarm_rule_description": "huawei",
  "keywords_requests": [ {
    "log_stream_id": "1",
    "log_group_id": "1",
    "keywords": "huawei",
    "condition": ">",
    "number": "100",
    "search_time_range": 10,
    "search_time_range_unit": "minute"
  } ],
  "frequency": {
    "type": "FIXED_RATE",
    "cron_expr": "",
    "hour_of_day": 0,
    "day_of_week": 0,
    "fixed_rate": 10,
    "fixed_rate_unit": "minute"
  },
  "keywords_alarm_level": "Critical",
  "keywords_alarm_send": true,
  "domain_id": "",
  "notification_frequency": 5,
  "alarm_action_rule_name": "",
  "notification_save_rule": {
```

```
"language" : "zh-cn",
"timezone" : "Asia/Shanghai",
"user_name" : "huawei",
"template_name" : "Message template name.",
"topics" : [{
  "name" : "huawei",
  "topic_urn" : "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
  "display_name" : "",
  "push_policy" : 0
}]
}
```

## Example Responses

### Status code: 200

The request is successful.

```
{
  "keywords_alarm_rule_id" : ""
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2005",
  "error_msg" : "Alarm rule params validator error."
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2001",
  "error_msg" : "Failed to create alarm rule."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a keyword alarm rule

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateKeywordsAlarmRuleSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    LtsClient client = LtsClient.newBuilder()
        .withCredential(auth)
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();
    CreateKeywordsAlarmRuleRequest request = new CreateKeywordsAlarmRuleRequest();
    CreateKeywordsAlarmRuleRequestBody body = new CreateKeywordsAlarmRuleRequestBody();
    List<Topics> listNotificationSaveRuleTopics = new ArrayList<>();
    listNotificationSaveRuleTopics.add(
        new Topics()
            .withName("huawei")
            .withTopicUrn("urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei")
            .withDisplayName("")
            .withPushPolicy(0)
    );
    SqlNotificationSaveRule notificationSaveRulebody = new SqlNotificationSaveRule();
    notificationSaveRulebody.withLanguage(SqlNotificationSaveRule.LanguageEnum.fromValue("zh-cn"))
        .withTimezone("Asia/Shanghai")
        .withUserName("huawei")
        .withTopics(listNotificationSaveRuleTopics)
        .withTemplateName("Message template name.");
    Frequency frequencybody = new Frequency();
    frequencybody.withType(Frequency.TypeEnum.fromValue("FIXED_RATE"))
        .withCronExpr("")
        .withHourOfDay(0)
        .withDayOfWeek(0)
        .withFixedRate(10)
        .withFixedRateUnit(Frequency.FixedRateUnitEnum.fromValue("minute"));
    List<KeywordsRequest> listbodyKeywordsRequests = new ArrayList<>();
    listbodyKeywordsRequests.add(
        new KeywordsRequest()
            .withLogStreamId("1")
            .withLogGroupId("1")
            .withKeywords("huawei")
            .withCondition(KeywordsRequest.ConditionEnum.fromValue(">"))
            .withNumber(100)
            .withSearchTimeRange(10)
            .withSearchTimeRangeUnit(KeywordsRequest.SearchTimeRangeUnitEnum.fromValue("minute"))
    );
    body.withAlarmActionRuleName("");

    body.withNotificationFrequency(CreateKeywordsAlarmRuleRequestBody.NotificationFrequencyEnum.NUMBER_5);
    body.withNotificationSaveRule(notificationSaveRulebody);
    body.withDomainId("");
    body.withKeywordsAlarmSend(true);

    body.withKeywordsAlarmLevel(CreateKeywordsAlarmRuleRequestBody.KeywordsAlarmLevelEnum.fromValue("Critical"));
    body.withFrequency(frequencybody);
    body.withKeywordsRequests(listbodyKeywordsRequests);
    body.withKeywordsAlarmRuleDescription("huawei");
    body.withKeywordsAlarmRuleName("huawei");
    request.withBody(body);
    try {
```

```
        CreateKeywordsAlarmRuleResponse response = client.createKeywordsAlarmRule(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Creating a keyword alarm rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateKeywordsAlarmRuleRequest()
        listTopicsNotificationSaveRule = [
            Topics(
                name="huawei",
                topic_urn="urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
                display_name="",
                push_policy=0
            )
        ]
        notificationSaveRulebody = SqlNotificationSaveRule(
            language="zh-cn",
            timezone="Asia/Shanghai",
            user_name="huawei",
            topics=listTopicsNotificationSaveRule,
            template_name="Message template name."
        )
        frequencybody = Frequency(
            type="FIXED_RATE",
            cron_expr="",
            hour_of_day=0,
            day_of_week=0,
            fixed_rate=10,
            fixed_rate_unit="minute"
        )
```

```
)
listKeywordsRequestsbody = [
  KeywordsRequest(
    log_stream_id="1",
    log_group_id="1",
    keywords="huawei",
    condition=">",
    number=100,
    search_time_range=10,
    search_time_range_unit="minute"
  )
]
request.body = CreateKeywordsAlarmRuleRequestBody(
  alarm_action_rule_name="",
  notification_frequency=5,
  notification_save_rule=notificationSaveRulebody,
  domain_id="",
  keywords_alarm_send=True,
  keywords_alarm_level="Critical",
  frequency=frequencybody,
  keywords_requests=listKeywordsRequestsbody,
  keywords_alarm_rule_description="huawei",
  keywords_alarm_rule_name="huawei"
)
response = client.create_keywords_alarm_rule(request)
print(response)
except exceptions.ClientRequestException as e:
  print(e.status_code)
  print(e.request_id)
  print(e.error_code)
  print(e.error_msg)
```

## Go

### Creating a keyword alarm rule

```
package main

import (
  "fmt"
  "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
  lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
  "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
  region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
  // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
  // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
  // variables and decrypted during use to ensure security.
  // In this example, AK and SK are stored in environment variables for authentication. Before running this
  // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
  ak := os.Getenv("CLOUD_SDK_AK")
  sk := os.Getenv("CLOUD_SDK_SK")
  projectId := "{project_id}"

  auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

  client := lts.NewLtsClient(
    lts.LtsClientBuilder().
      WithRegion(region.ValueOf("<YOUR REGION>")).
      WithCredential(auth).
      Build())

  request := &model.CreateKeywordsAlarmRuleRequest{}
```

```
displayNameTopics:= ""
pushPolicyTopics:= int32(0)
var listTopicsNotificationSaveRule = []model.Topics{
    {
        Name: "huawei",
        TopicUrn: "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
        DisplayName: &displayNameTopics,
        PushPolicy: &pushPolicyTopics,
    },
}
timezoneNotificationSaveRule:= "Asia/Shanghai"
notificationSaveRulebody := &model.SqlNotificationSaveRule{
    Language: model.GetSqlNotificationSaveRuleLanguageEnum().ZH_CN,
    Timezone: &timezoneNotificationSaveRule,
    UserName: "huawei",
    Topics: listTopicsNotificationSaveRule,
    TemplateName: "Message template name.",
}
cronExprFrequency:= ""
hourOfDayFrequency:= int32(0)
dayOfWeekFrequency:= int32(0)
fixedRateFrequency:= int32(10)
fixedRateUnitFrequency:= model.GetFrequencyFixedRateUnitEnum().MINUTE
frequencybody := &model.Frequency{
    Type: model.GetFrequencyTypeEnum().FIXED_RATE,
    CronExpr: &cronExprFrequency,
    HourOfDay: &hourOfDayFrequency,
    DayOfWeek: &dayOfWeekFrequency,
    FixedRate: &fixedRateFrequency,
    FixedRateUnit: &fixedRateUnitFrequency,
}
var listKeywordsRequestsbody = []model.KeywordsRequest{
    {
        LogStreamId: "1",
        LogGroupId: "1",
        Keywords: "huawei",
        Condition: model.GetKeywordsRequestConditionEnum().GREATER_THAN,
        Number: int32(100),
        SearchTimeRange: int32(10),
        SearchTimeRangeUnit: model.GetKeywordsRequestSearchTimeRangeUnitEnum().MINUTE,
    },
}
alarmActionRuleNameCreateKeywordsAlarmRuleRequestBody:= ""
keywordsAlarmRuleDescriptionCreateKeywordsAlarmRuleRequestBody:= "huawei"
request.Body = &model.CreateKeywordsAlarmRuleRequestBody{
    AlarmActionRuleName: &alarmActionRuleNameCreateKeywordsAlarmRuleRequestBody,
    NotificationFrequency:
model.GetCreateKeywordsAlarmRuleRequestBodyNotificationFrequencyEnum().E_5,
    NotificationSaveRule: notificationSaveRulebody,
    DomainId: "",
    KeywordsAlarmSend: true,
    KeywordsAlarmLevel:
model.GetCreateKeywordsAlarmRuleRequestBodyKeywordsAlarmLevelEnum().CRITICAL,
    Frequency: frequencybody,
    KeywordsRequests: listKeywordsRequestsbody,
    KeywordsAlarmRuleDescription:
&keywordsAlarmRuleDescriptionCreateKeywordsAlarmRuleRequestBody,
    KeywordsAlarmRuleName: "huawei",
}
response, err := client.CreateKeywordsAlarmRule(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.13.2 Modifying a Keyword Alarm Rule

### Function

This API is used to modify a keyword alarm.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/{project\_id}/lts/alarms/keywords-alarm-rule

**Table 6-574** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-575** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-576** Request body parameters

Parameter	Mandatory	Type	Description
keywords_alarm_rule_id	Yes	String	Keyword alarm rule ID. Minimum: <b>36</b> Maximum: <b>36</b>
keywords_alarm_rule_name	Yes	String	Original rule name, which cannot be changed. Minimum: <b>1</b> Maximum: <b>64</b>
alarm_rule_alias	No	String	Rule name. Minimum: <b>1</b> Maximum: <b>64</b>
keywords_alarm_rule_description	No	String	Keyword alarm description. Minimum: <b>0</b> Maximum: <b>64</b>
keywords_requests	Yes	Array of <a href="#">KeywordsRequest</a> objects	Keyword details.
frequency	Yes	<a href="#">Frequency</a> object	Alarm statistical period.



Parameter	Mandatory	Type	Description
keywords_alarm_level	Yes	String	Alarm severity. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>Critical</b></li> </ul>
keywords_alarm_send	Yes	Boolean	Whether to send an alarm.
keywords_alarm_send_code	Yes	Integer	Subject. <b>0</b> : unchanged; <b>1</b> : added; <b>2</b> : modified; <b>3</b> : deleted. Minimum: <b>0</b> Maximum: <b>3</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>0</b></li> <li>• <b>1</b></li> <li>• <b>2</b></li> <li>• <b>3</b></li> </ul>
domain_id	Yes	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>
notification_save_rule	No	<a href="#">SqlNotificationSaveRule</a> object	Topic
trigger_condition_count	No	Integer	Number of times that log events meet the trigger condition. The default value is <b>1</b> .
trigger_condition_frequency	No	Integer	Number of queries in which the triggering condition is met. The default value is <b>1</b> .
whether_recovery_policy	No	Boolean	Whether to enable the alarm clearance notification. The default value is <b>false</b> .
recovery_policy	No	Integer	Number of queries in which the triggering condition is not met. The alarm is cleared when this number reaches the value ( <b>3</b> by default) of this parameter.

Parameter	Mandatory	Type	Description
notification_frequency	Yes	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 5</li> <li>• 10</li> <li>• 15</li> <li>• 30</li> <li>• 60</li> <li>• 180</li> <li>• 360</li> </ul>
alarm_action_rule_name	No	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-577** KeywordsRequest

Parameter	Mandatory	Type	Description
log_stream_id	Yes	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	No	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	Yes	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	No	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
keywords	Yes	String	Keyword Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
condition	Yes	String	Condition Enumeration values: <ul style="list-style-type: none"> <li>• &gt;=</li> <li>• &lt;=</li> <li>• &lt;</li> <li>• &gt;</li> </ul>
number	Yes	Integer	Row Minimum: <b>1</b> Maximum: <b>2147483647</b>
search_time_range	Yes	Integer	Time range for querying the latest data when a task is executed. The maximum value is 60 and the minimum is 1 if the unit is minute. The maximum is 24 and the minimum is 1 if the unit is hour.
search_time_range_unit	Yes	String	Query time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> </ul>

**Table 6-578** Frequency

Parameter	Mandatory	Type	Description
type	Yes	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>
cron_expr	No	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
hour_of_day	No	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> . <b>DAILY</b> ranges from 0 to 23. <b>WEEKLY</b> ranges from 0 to 23.
day_of_week	No	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday). Minimum: <b>1</b> Maximum: <b>7</b>
fixed_rate	No	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the value ranges from 5 to 24. Minimum: <b>1</b> Maximum: <b>60</b>
fixed_rate_unit	No	String	Time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-579** SqlNotificationSaveRule

Parameter	Mandatory	Type	Description
language	Yes	String	Language of the preference. Minimum: <b>0</b> Maximum: <b>10</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
timezone	No	String	Time zone of the preference. Minimum: <b>0</b> Maximum: <b>1024</b>
user_name	Yes	String	Username. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
topics	Yes	Array of <b>Topics</b> objects	Topic information.
template_name	Yes	String	Message template name.

**Table 6-580** Topics

Parameter	Mandatory	Type	Description
name	Yes	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	Yes	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>
display_name	No	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	No	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

## Response Parameters

Status code: 200

**Table 6-581** Response body parameters

Parameter	Type	Description
keywords_alarm_rule_id	String	Keyword alarm ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
keywords_alarm_rule_name	String	Original rule name. Minimum: <b>1</b> Maximum: <b>64</b>
alarm_rule_alias	String	Rule name.
keywords_alarm_rule_description	String	Keyword alarm description. Minimum: <b>0</b> Maximum: <b>64</b>
keywords_requests	Array of <a href="#">KeywordsResponseBody</a> objects	Keyword details.
frequency	<a href="#">FrequencyResponseBody</a> object	Alarm statistical period.
keywords_alarm_level	String	Alarm severity. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>Critical</b></li> </ul>
keywords_alarm_send	Boolean	Whether to send an alarm.
domain_id	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>
create_time	Long	Creation time (timestamp in milliseconds). Minimum: <b>13</b> Maximum: <b>13</b>
update_time	Long	Update time (timestamp in milliseconds). Minimum: <b>13</b> Maximum: <b>13</b>

Parameter	Type	Description
language	String	Language of information added to emails. Minimum: <b>1</b> Maximum: <b>1024</b> Enumeration values: <ul style="list-style-type: none"> <li>• <b>zh-cn</b></li> <li>• <b>en-us</b></li> </ul>
projectId	String	Project ID.
topics	Array of <b>Topics</b> objects	Topic.
condition_expression	String	Description.
indexId	String	Index ID.
notification_frequency	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• <b>0</b></li> <li>• <b>5</b></li> <li>• <b>10</b></li> <li>• <b>15</b></li> <li>• <b>30</b></li> <li>• <b>60</b></li> <li>• <b>180</b></li> <li>• <b>360</b></li> </ul>
alarm_action_rule_name	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-582** KeywordsResBody

Parameter	Type	Description
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>

Parameter	Type	Description
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
keywords	String	Keyword Minimum: <b>1</b> Maximum: <b>1024</b>
condition	String	Condition Enumeration values: <ul style="list-style-type: none"> <li>• &gt;=</li> <li>• &lt;=</li> <li>• &lt;</li> <li>• &gt;</li> </ul>
number	Integer	Number of lines. Minimum: <b>1</b> Maximum: <b>2147483647</b>
search_time_range	Integer	Time range for querying the latest data when a task is executed. The maximum value is <b>60</b> . Minimum: <b>1</b> Maximum: <b>60</b>
search_time_range_unit	String	Query time unit.



**Table 6-583** FrequencyRespBody

Parameter	Type	Description
type	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>
cron_expr	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>
hour_of_day	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> .
day_of_week	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday).
fixed_rate	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the maximum value is 24.
fixed_rate_unit	String	Enumerated values of the time unit: Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-584** Topics

Parameter	Type	Description
name	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>
topic_urn	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Type	Description
display_name	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

**Status code: 400**

**Table 6-585** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

**Status code: 500**

**Table 6-586** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

### Modifying a keyword alarm rule

```
PUT https://{endpoint}/v2/{project_id}/lts/alarms/keywords-alarm-rule
```

```
{
  "keywords_alarm_rule_id" : "",
  "keywords_alarm_rule_name" : "huawei",
  "alarm_rule_alias" : "zhangsan",
  "keywords_alarm_rule_description" : "huawei",
  "keywords_requests" : [ {
```

```
"log_stream_id" : "1",
"log_group_id" : "1",
"keywords" : "huawei",
"condition" : ">",
"number" : "100",
"search_time_range" : 10,
"search_time_range_unit" : "minute"
}],
"frequency" : {
  "type" : "FIXED_RATE",
  "cron_expr" : "",
  "hour_of_day" : 0,
  "day_of_week" : 0,
  "fixed_rate" : 10,
  "fixed_rate_unit" : "minute"
},
"keywords_alarm_level" : "Critical",
"keywords_alarm_send" : true,
"keywords_alarm_send_code" : "2",
"domain_id" : "",
"notification_frequency" : 5,
"alarm_action_rule_name" : "",
"notification_save_rule" : {
  "language" : "zh-cn",
  "timezone" : "Asia/Shanghai",
  "user_name" : "huawei",
  "template_name" : "Message template name.",
  "topics" : [ {
    "name" : "huawei",
    "topic_urn" : "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
    "display_name" : "",
    "push_policy" : 0
  } ]
}
}
```

## Example Responses

### Status code: 200

The request is successful.

```
{
  "keywords_alarm_rule_id" : "",
  "keywords_alarm_rule_name" : "huawei",
  "keywords_alarm_rule_description" : "huawei",
  "alarm_rule_alias" : "zhangan",
  "keywords_requests" : [ {
    "log_stream_id" : "1",
    "log_stream_name" : "huawei",
    "log_group_name" : "huawei",
    "log_group_id" : "1",
    "keywords" : "huawei",
    "condition" : ">",
    "number" : "100",
    "search_time_range" : 10,
    "search_time_range_unit" : "minute"
  } ],
  "frequency" : {
    "type" : "FIXED_RATE",
    "cron_expr" : "",
    "hour_of_day" : 0,
    "day_of_week" : 0,
    "fixed_rate" : 10,
    "fixed_rate_unit" : "minute"
  },
  "keywords_alarm_level" : "Critical",
  "keywords_alarm_send" : false,
  "domain_id" : "",

```

```
"notification_frequency" : 5,
"alarm_action_rule_name" : "",
"topics" : [ {
  "name" : "huawei",
  "topic_urn" : "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
  "display_name" : "",
  "push_policy" : 0
} ],
"language" : "zh-cn"
}
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code" : "LTS.2005",
  "error_msg" : "Alarm rule params validator error."
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2003",
  "error_msg" : "Failed to update alarm rule."
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Modifying a keyword alarm rule

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateKeywordsAlarmRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
```

```
.withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateKeywordsAlarmRuleRequest request = new UpdateKeywordsAlarmRuleRequest();
UpdateKeywordsAlarmRuleRequestBody body = new UpdateKeywordsAlarmRuleRequestBody();
List<Topics> listNotificationSaveRuleTopics = new ArrayList<>();
listNotificationSaveRuleTopics.add(
    new Topics()
        .withName("huawei")
        .withTopicUrn("urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei")
        .withDisplayName("")
        .withPushPolicy(0)
);
SqlNotificationSaveRule notificationSaveRulebody = new SqlNotificationSaveRule();
notificationSaveRulebody.withLanguage(SqlNotificationSaveRule.LanguageEnum.fromValue("zh-cn"))
    .withTimezone("Asia/Shanghai")
    .withUserName("huawei")
    .withTopics(listNotificationSaveRuleTopics)
    .withTemplateName("Message template name.");
Frequency frequencybody = new Frequency();
frequencybody.withType(Frequency.TypeEnum.fromValue("FIXED_RATE"))
    .withCronExpr("")
    .withHourOfDay(0)
    .withDayOfWeek(0)
    .withFixedRate(10)
    .withFixedRateUnit(Frequency.FixedRateUnitEnum.fromValue("minute"));
List<KeywordsRequest> listbodyKeywordsRequests = new ArrayList<>();
listbodyKeywordsRequests.add(
    new KeywordsRequest()
        .withLogStreamId("1")
        .withLogGroupId("1")
        .withKeywords("huawei")
        .withCondition(KeywordsRequest.ConditionEnum.fromValue(">"))
        .withNumber(100)
        .withSearchTimeRange(10)
        .withSearchTimeRangeUnit(KeywordsRequest.SearchTimeRangeUnitEnum.fromValue("minute"))
);
body.withAlarmActionRuleName("");

body.withNotificationFrequency(UpdateKeywordsAlarmRuleRequestBody.NotificationFrequencyEnum.NUMBER_5);
body.withNotificationSaveRule(notificationSaveRulebody);
body.withDomainId("");

body.withKeywordsAlarmSendCode(UpdateKeywordsAlarmRuleRequestBody.KeywordsAlarmSendCodeEnum.NUMBER_2);
body.withKeywordsAlarmSend(true);

body.withKeywordsAlarmLevel(UpdateKeywordsAlarmRuleRequestBody.KeywordsAlarmLevelEnum.fromValue("Critical"));
body.withFrequency(frequencybody);
body.withKeywordsRequests(listbodyKeywordsRequests);
body.withKeywordsAlarmRuleDescription("huawei");
body.withAlarmRuleAlias("zhangsan");
body.withKeywordsAlarmRuleName("huawei");
body.withKeywordsAlarmRuleId("");
request.withBody(body);
try {
    UpdateKeywordsAlarmRuleResponse response = client.updateKeywordsAlarmRule(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
}
```

```
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Modifying a keyword alarm rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateKeywordsAlarmRuleRequest()
        listTopicsNotificationSaveRule = [
            Topics(
                name="huawei",
                topic_urn="urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
                display_name="",
                push_policy=0
            )
        ]
        notificationSaveRulebody = SqlNotificationSaveRule(
            language="zh-cn",
            timezone="Asia/Shanghai",
            user_name="huawei",
            topics=listTopicsNotificationSaveRule,
            template_name="Message template name."
        )
        frequencybody = Frequency(
            type="FIXED_RATE",
            cron_expr="",
            hour_of_day=0,
            day_of_week=0,
            fixed_rate=10,
            fixed_rate_unit="minute"
        )
        listKeywordsRequestsbody = [
            KeywordsRequest(
                log_stream_id="1",
                log_group_id="1",
                keywords="huawei",
                condition=">",
                number=100,
            )
        ]
```

```
        search_time_range=10,
        search_time_range_unit="minute"
    )
]
request.body = UpdateKeywordsAlarmRuleRequestBody(
    alarm_action_rule_name="",
    notification_frequency=5,
    notification_save_rule=notificationSaveRulebody,
    domain_id="",
    keywords_alarm_send_code=2,
    keywords_alarm_send=True,
    keywords_alarm_level="Critical",
    frequency=frequencybody,
    keywords_requests=listKeywordsRequestsbody,
    keywords_alarm_rule_description="huawei",
    alarm_rule_alias="zhangsan",
    keywords_alarm_rule_name="huawei",
    keywords_alarm_rule_id=""
)
response = client.update_keywords_alarm_rule(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Modifying a keyword alarm rule

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateKeywordsAlarmRuleRequest{
        displayNameTopics:= ""
        pushPolicyTopics:= int32(0)
        var listTopicsNotificationSaveRule = []model.Topics{
            {
                Name: "huawei",
```

```

        TopicUrn: "urn:smn:cn-north-7:1b06fc5dc0814a4da1594a9ade9cb93c:huawei",
        DisplayName: &displayNameTopics,
        PushPolicy: &pushPolicyTopics,
    },
}
timezoneNotificationSaveRule:= "Asia/Shanghai"
notificationSaveRulebody := &model.SqlNotificationSaveRule{
    Language: model.GetSqlNotificationSaveRuleLanguageEnum().ZH_CN,
    Timezone: &timezoneNotificationSaveRule,
    UserName: "huawei",
    Topics: listTopicsNotificationSaveRule,
    TemplateName: "Message template name.",
}
cronExprFrequency:= ""
hourOfDayFrequency:= int32(0)
dayOfWeekFrequency:= int32(0)
fixedRateFrequency:= int32(10)
fixedRateUnitFrequency:= model.GetFrequencyFixedRateUnitEnum().MINUTE
frequencybody := &model.Frequency{
    Type: model.GetFrequencyTypeEnum().FIXED_RATE,
    CronExpr: &cronExprFrequency,
    HourOfDay: &hourOfDayFrequency,
    DayOfWeek: &dayOfWeekFrequency,
    FixedRate: &fixedRateFrequency,
    FixedRateUnit: &fixedRateUnitFrequency,
}
var listKeywordsRequestsbody = []model.KeywordsRequest{
    {
        LogStreamId: "1",
        LogGroupId: "1",
        Keywords: "huawei",
        Condition: model.GetKeywordsRequestConditionEnum().GREATER_THAN,
        Number: int32(100),
        SearchTimeRange: int32(10),
        SearchTimeRangeUnit: model.GetKeywordsRequestSearchTimeRangeUnitEnum().MINUTE,
    },
}
alarmActionRuleNameUpdateKeywordsAlarmRuleRequestBody:= ""
keywordsAlarmRuleDescriptionUpdateKeywordsAlarmRuleRequestBody:= "huawei"
alarmRuleAliasUpdateKeywordsAlarmRuleRequestBody:= "zhangan"
request.Body = &model.UpdateKeywordsAlarmRuleRequestBody{
    AlarmActionRuleName: &alarmActionRuleNameUpdateKeywordsAlarmRuleRequestBody,
    NotificationFrequency:
model.GetUpdateKeywordsAlarmRuleRequestBodyNotificationFrequencyEnum().E_5,
    NotificationSaveRule: notificationSaveRulebody,
    DomainId: "",
    KeywordsAlarmSendCode:
model.GetUpdateKeywordsAlarmRuleRequestBodyKeywordsAlarmSendCodeEnum().E_2,
    KeywordsAlarmSend: true,
    KeywordsAlarmLevel:
model.GetUpdateKeywordsAlarmRuleRequestBodyKeywordsAlarmLevelEnum().CRITICAL,
    Frequency: frequencybody,
    KeywordsRequests: listKeywordsRequestsbody,
    KeywordsAlarmRuleDescription:
&keywordsAlarmRuleDescriptionUpdateKeywordsAlarmRuleRequestBody,
    AlarmRuleAlias: &alarmRuleAliasUpdateKeywordsAlarmRuleRequestBody,
    KeywordsAlarmRuleName: "huawei",
    KeywordsAlarmRuleId: "",
}
response, err := client.UpdateKeywordsAlarmRule(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}

```



## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

### 6.13.3 Querying a Keyword Alarm Rule

#### Function

This API is used to query a keyword alarm.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2/{project\_id}/lts/alarms/keywords-alarm-rule

**Table 6-587** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-588** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-589** Response body parameters

Parameter	Type	Description
keywords_alarm_rules	Array of <a href="#">KeywordsAlarmRuleRespList</a> objects	Project ID.

**Table 6-590** KeywordsAlarmRuleRespList

Parameter	Type	Description
projectId	String	Project ID. Minimum: <b>32</b> Maximum: <b>32</b>
keywords_alarm_rule_id	String	Keyword alarm ID. Minimum: <b>36</b> Maximum: <b>36</b>
keywords_alarm_rule_name	String	Keyword alarm names. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Type	Description
keywords_alarm_rule_description	String	Keyword alarm description. Minimum: <b>0</b> Maximum: <b>64</b>
condition_expression	String	Condition. Minimum: <b>0</b> Maximum: <b>64</b>
keywords_requests	Array of <b>KeywordsRequest</b> objects	Keyword details.
frequency	<b>Frequency</b> object	Alarm statistical period.
keywords_alarm_level	String	Alarm severity. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Info</b></li> <li>• <b>Minor</b></li> <li>• <b>Major</b></li> <li>• <b>Critical</b></li> </ul>
keywords_alarm_send	Boolean	Whether to send an alarm.
domain_id	String	domainId Minimum: <b>32</b> Maximum: <b>32</b>
create_time	Long	Creation time (timestamp in milliseconds). Minimum: <b>13</b> Maximum: <b>13</b>
update_time	Long	Update time (timestamp in milliseconds). Minimum: <b>13</b> Maximum: <b>13</b>
topics	Array of <b>Topics</b> objects	Topic.
template_name	String	Message template name.
status	String	Alarm status. Enumeration values: <ul style="list-style-type: none"> <li>• <b>RUNNING: enabled</b></li> <li>• <b>STOPPING: disabled</b></li> </ul>

Parameter	Type	Description
trigger_condition_count	Integer	Number of queries in which the triggering condition is met. The default value is <b>1</b> .
trigger_condition_frequency	Integer	Number of times that log events meet the trigger condition. The default value is <b>1</b> .
whether_recovery_policy	Boolean	Whether to enable the alarm clearance notification. The default value is <b>false</b> .
recovery_policy	Integer	Number of queries in which the triggering condition is not met. The alarm is cleared when this number reaches the value ( <b>3</b> by default) of this parameter.
notification_frequency	Integer	Notification frequency, in minutes. Enumeration values: <ul style="list-style-type: none"> <li>• <b>0</b></li> <li>• <b>5</b></li> <li>• <b>10</b></li> <li>• <b>15</b></li> <li>• <b>30</b></li> <li>• <b>60</b></li> <li>• <b>180</b></li> <li>• <b>360</b></li> </ul>
alarm_action_rule_name	String	Alarm action rule name. <b>NOTE</b> Set <b>alarm_action_rule_name</b> or <b>notification_save_rule</b> . If you set both of them, the value of <b>alarm_action_rule_name</b> is prioritized.

**Table 6-591** KeywordsRequest

Parameter	Type	Description
log_stream_id	String	Log stream ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>

Parameter	Type	Description
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
keywords	String	Keyword Minimum: <b>1</b> Maximum: <b>1024</b>
condition	String	Condition Enumeration values: <ul style="list-style-type: none"> <li>• &gt;=</li> <li>• &lt;=</li> <li>• &lt;</li> <li>• &gt;</li> </ul>
number	Integer	Row Minimum: <b>1</b> Maximum: <b>2147483647</b>
search_time_range	Integer	Time range for querying the latest data when a task is executed. The maximum value is 60 and the minimum is 1 if the unit is minute. The maximum is 24 and the minimum is 1 if the unit is hour.
search_time_range_unit	String	Query time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> </ul>

**Table 6-592** Frequency

Parameter	Type	Description
type	String	Time type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>CRON</b></li> <li>• <b>HOURLY</b></li> <li>• <b>DAILY</b></li> <li>• <b>WEEKLY</b></li> <li>• <b>FIXED_RATE</b></li> </ul>
cron_expr	String	This field is used when type is set to <b>CRON</b> . Minimum: <b>1</b> Maximum: <b>1024</b>
hour_of_day	Integer	This field is used when type is set to <b>DAILY</b> or <b>WEEKLY</b> . <b>DAILY</b> ranges from 0 to 23. <b>WEEKLY</b> ranges from 0 to 23.
day_of_week	Integer	This field is used when type is set to <b>WEEKLY</b> (Sunday to Saturday). Minimum: <b>1</b> Maximum: <b>7</b>
fixed_rate	Integer	This field is used when type is set to <b>FIXED_RATE</b> . If the unit of <b>fixed_rate_unit</b> is minute, the maximum value is 60. If the unit is hour, the value ranges from 5 to 24. Minimum: <b>1</b> Maximum: <b>60</b>
fixed_rate_unit	String	Time unit. Enumeration values: <ul style="list-style-type: none"> <li>• <b>minute</b></li> <li>• <b>hour</b></li> </ul>

**Table 6-593** Topics

Parameter	Type	Description
name	String	Topic name. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Type	Description
topic_urn	String	Specifies the resource identifier of the topic, which is unique. Minimum: <b>1</b> Maximum: <b>1024</b>
display_name	String	Specifies the topic display name, which is presented as the name of the email sender in email messages. Minimum: <b>1</b> Maximum: <b>1024</b>
push_policy	Integer	Specifies the message push policy. Minimum: <b>1</b> Maximum: <b>1024</b>

**Status code: 500**

**Table 6-594** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Invalid projectId</b></li> </ul>

## Example Requests

Querying a keyword alarm rule

```
GET https://{endpoint}/v2/{project_id}/lts/alarms/keywords-alarm-rule
/v2/{project_id}/lts/alarms/keywords-alarm-rule
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "keywords_alarm_rules" : [ {
    "projectId" : "string",
    "keywords_alarm_rule_id" : "string",
    "keywords_alarm_rule_name" : "string",
    "keywords_alarm_rule_description" : "string",
    "condition_expression" : "string",
    "keywords_requests" : [ {
      "log_stream_id" : "string",
```

```

"log_stream_name" : "string",
"log_group_id" : "string",
"log_group_name" : "string",
"keywords" : "string",
"condition" : ">=",
"number" : 1,
"search_time_range" : 0,
"search_time_range_unit" : "minute"
}],
"frequency" : {
  "type" : "CRON",
  "cron_expr" : "string",
  "hour_of_day" : 0,
  "day_of_week" : 0,
  "fixed_rate" : 0,
  "fixed_rate_unit" : "minute"
},
"keywords_alarm_level" : "Info",
"keywords_alarm_send" : true,
"domain_id" : "string",
"create_time" : 0,
"update_time" : 0,
"template_name" : "Message template name.",
"status" : "RUNNING",
"trigger_condition_count" : "1",
"trigger_condition_frequency" : "1",
"whether_recovery_policy" : false,
"recovery_policy" : "3",
"notification_frequency" : 5,
"alarm_action_rule_name" : "",
"topics" : [ {
  "name" : "string",
  "topic_urn" : "string",
  "display_name" : "string",
  "push_policy" : 0
} ]
} ]
}

```

**Status code: 500**

The server has received the request but encountered an internal error.

```

{
  "error_code" : "LTS.2008",
  "error_msg" : "Find Alarm rule failed."
}

```

**Status Codes**

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

**Error Codes**

See [Error Codes](#).



## 6.13.4 Deleting a Keyword Alarm Rule

### Function

This API is used to delete a keyword alarm.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/{project\_id}/lts/alarms/keywords-alarm-rule/{keywords\_alarm\_rule\_id}

**Table 6-595** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
keywords_alarm_rule_id	Yes	String	Keyword alarm rule ID. Minimum: <b>36</b> Maximum: <b>36</b>

### Request Parameters

**Table 6-596** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 500

**Table 6-597** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message. Enumeration values: <ul style="list-style-type: none"> <li>Invalid projectId</li> </ul>

## Example Requests

Deleting a keyword alarm by alarm ID

```
POST https://{endpoint}/v2/{project_id}/lts/alarms/keywords-alarm-rule/{keywords_alarm_rule_id}
/v2/{project_id}/lts/alarms/keywords-alarm-rule/{keywords_alarm_rule_id}
```

## Example Responses

Status code: 500

The server has received the request but encountered an internal error.

```
{
  "error_code" : "LTS.2002",
  "error_msg" : "Failed to update alarm rule."
}
```

## Status Codes

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.14 Alarm List

## 6.14.1 Querying the Active or Historical Alarm List

### Function

This API is used to query the alarm list.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/{domain\_id}/lts/alarms/sql-alarm/query

**Table 6-598** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: 32 Maximum: 32

**Table 6-599** Query Parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Whether the alarm is an active alarm or a historical alarm. Enumeration values: <ul style="list-style-type: none"> <li>• <b>active_alert</b></li> <li>• <b>history_alert</b></li> </ul>

Parameter	Mandatory	Type	Description
marker	No	String	The value is the ID of the last record on the previous page (value of <b>previous_marker</b> or <b>next_marker</b> returned by the previous page). Minimum: <b>0</b> Maximum: <b>1000</b>
limit	No	Integer	Number of records on each page. Minimum: <b>0</b> Maximum: <b>1000</b>

## Request Parameters

**Table 6-600** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-601** Request body parameters

Parameter	Mandatory	Type	Description
whether_cust om_field	Yes	Boolean	Whether to customize the query time segment.
start_time	No	Long	Start time of a customized time segment (timestamp). Minimum: <b>13</b> Maximum: <b>13</b>

Parameter	Mandatory	Type	Description
end_time	No	Long	End time of a customized time segment (timestamp). Minimum: <b>13</b> Maximum: <b>13</b>
time_range	No	String	Non-customized time range (in minutes). Minimum: <b>1</b> Maximum: <b>32</b>
search	No	String	Keyword search criteria. Minimum: <b>1</b> Maximum: <b>1024</b>
alarm_level_ids	No	Array of strings	Alarm severity ( <b>Critical, Major, Minor, Info</b> ). <b>NOTE</b> <b>alarmLevelIds</b> is a parameter of an earlier version and is currently compatible with this parameter. You are advised to use this parameter. alarm_level_ids
sort	No	<b>Sort</b> object	Sort search criteria.
step	No	Integer	Keyword search criteria.

**Table 6-602** Sort

Parameter	Mandatory	Type	Description
order_by	Yes	Array of strings	Sorting field.
order	Yes	String	Sorting order. Enumeration values: <ul style="list-style-type: none"> <li>• <b>desc</b></li> <li>• <b>asc</b></li> </ul>

## Response Parameters

Status code: 200

**Table 6-603** Response body parameters

Parameter	Type	Description
events	Array of <b>Events</b> objects	Alarm information. Minimum length: 0 characters Maximum length: 2048 characters
page_info	<b>PageInfo</b> object	Pagination details. Minimum length: 0 characters Maximum length: 2048 characters

**Table 6-604** Events

Parameter	Type	Description
annotations	<b>Annotations</b> object	Alarm details. The length ranges from 0 to 5000 characters.
metadata	<b>Metadata</b> object	Alarms Minimum length: 0 characters Maximum length: 2048 characters
arrives_at	Long	Arrival time (timestamp). Minimum: <b>13</b> Maximum: <b>13</b>
ends_at	Long	Alarm clearance time (timestamp). Minimum: <b>13</b> Maximum: <b>13</b>
id	String	Alarm ID. Minimum: <b>0</b> Maximum: <b>64</b>
starts_at	Long	Alarm generation time (timestamp). Minimum: <b>13</b> Maximum: <b>13</b>
timeout	Long	Time when an alarm is automatically cleared (timestamp). Minimum: <b>1</b> Maximum: <b>13</b>
type	String	Alarm rule type (SQL/keyword). Minimum: <b>0</b> Maximum: <b>16</b>

**Table 6-605** Annotations

Parameter	Type	Description
message	String	Alarm list details. Minimum: <b>1</b> Maximum: <b>1024</b>
log_info	String	Log group/stream ID. Minimum: <b>1</b> Maximum: <b>1024</b>
current_value	String	Current value. Minimum: <b>1</b> Maximum: <b>1024</b>
old_annotations	String	Original data of (SQL/keyword) alarm details. Minimum: <b>0</b> Maximum: <b>10000</b>

**Table 6-606** Metadata

Parameter	Type	Description
event_type	String	Alarm type. Minimum: <b>1</b> Maximum: <b>1024</b>
event_id	String	Alarm ID. Minimum: <b>1</b> Maximum: <b>1024</b>
event_severity	String	Alarm severity. Minimum: <b>1</b> Maximum: <b>1024</b>
event_name	String	Alarm name. Minimum: <b>1</b> Maximum: <b>1024</b>
resource_type	String	Resource type. Minimum: <b>1</b> Maximum: <b>1024</b>
resource_id	String	Log group/stream name. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Type	Description
resource_provider	String	Alarm source. Minimum: <b>1</b> Maximum: <b>1024</b>
lts_alarm_type	String	Alarm rule type (SQL/keyword). Minimum: <b>1</b> Maximum: <b>100</b>
log_group_name	String	Original log group name.
log_stream_name	String	Original log stream name.

**Table 6-607** PageInfo

Parameter	Type	Description
next_marker	String	Address of the next page. If this parameter is left empty, no data is displayed on the next page. Minimum: <b>0</b> Maximum: <b>5000</b>
previous_marker	String	Address of the previous page. Minimum: <b>0</b> Maximum: <b>5000</b>
current_count	String	Number of items returned on this page. Minimum: <b>0</b> Maximum: <b>1000</b>

## Example Requests

Querying the active or historical alarm list

```
POST https://{endpoint}/v2/{project_id}/{domain_id}/lts/alarms/sql-alarm/query
```

```
{
  "whether_custom_field" : false,
  "start_time" : 0,
  "end_time" : 0,
  "time_range" : "30",
  "search" : "",
  "alarm_level_ids" : [ "Critical", "Major", "Minor", "Info" ],
  "sort" : {
    "order_by" : [ "starts_at" ],
    "order" : "desc"
  }
}
```



## Example Responses

### Status code: 200

The request is successful.

```
{
  "events": [ {
    "annotations": {
      "message": "string",
      "log_info": "string",
      "current_value": "string"
    },
    "metadata": {
      "event_type": "string",
      "event_id": "string",
      "event_severity": "string",
      "event_name": "string",
      "resource_type": "string",
      "resource_id": "string",
      "resource_provider": "string",
      "lts_alarm_type": "string"
    },
    "id": "string",
    "type": "string"
  } ],
  "page_info": {
    "next_marker": "string",
    "previous_marker": "string",
    "current_count": 0
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Querying the active or historical alarm list

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListActiveOrHistoryAlarmsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
```

```
.withAk(ak)
.withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
ListActiveOrHistoryAlarmsRequest request = new ListActiveOrHistoryAlarmsRequest();
request.withDomainId("{domain_id}");
ListActiveOrHistoryAlarmsRequestBody body = new ListActiveOrHistoryAlarmsRequestBody();
List<String> listSortOrderBy = new ArrayList<>();
listSortOrderBy.add("starts_at");
Sort sortbody = new Sort();
sortbody.withOrderBy(listSortOrderBy)
    .withOrder(Sort.OrderEnum.fromValue("desc"));
List<String> listbodyAlarmLevelIds = new ArrayList<>();
listbodyAlarmLevelIds.add("Critical");
listbodyAlarmLevelIds.add("Major");
listbodyAlarmLevelIds.add("Minor");
listbodyAlarmLevelIds.add("Info");
body.withSort(sortbody);
body.withAlarmLevelIds(listbodyAlarmLevelIds);
body.withSearch("");
body.withTimeRange("30");
body.withEndTime(0L);
body.withStartTime(0L);
body.withWhetherCustomField(false);
request.withBody(body);
try {
    ListActiveOrHistoryAlarmsResponse response = client.listActiveOrHistoryAlarms(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Querying the active or historical alarm list

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = LtsClient.new_builder() \
```

```
.with_credentials(credentials) \  
.with_region(LtsRegion.value_of("<YOUR REGION>")) \  
.build()  
  
try:  
    request = ListActiveOrHistoryAlarmsRequest()  
    request.domain_id = "{domain_id}"  
    listOrderBySort = [  
        "starts_at"  
    ]  
    sortbody = Sort(  
        order_by=listOrderBySort,  
        order="desc"  
    )  
    listAlarmLevelIdsbody = [  
        "Critical",  
        "Major",  
        "Minor",  
        "Info"  
    ]  
    request.body = ListActiveOrHistoryAlarmsRequestBody(  
        sort=sortbody,  
        alarm_level_ids=listAlarmLevelIdsbody,  
        search="",  
        time_range="30",  
        end_time=0,  
        start_time=0,  
        whether_custom_field=False  
    )  
    response = client.list_active_or_history_alarms(request)  
    print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

## Go

### Querying the active or historical alarm list

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := lts.NewLtsClient(  
        lts.LtsClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).
```

```

Build()

request := &model.ListActiveOrHistoryAlarmsRequest{}
request.DomainId = "{domain_id}"
var listOrderBySort = []string{
    "starts_at",
}
sortbody := &model.Sort{
    OrderBy: listOrderBySort,
    Order: model.GetSortOrderEnum().DESC,
}
var listAlarmLevelIdsbody = []string{
    "Critical",
    "Major",
    "Minor",
    "Info",
}
searchListActiveOrHistoryAlarmsRequestBody:= ""
timeRangeListActiveOrHistoryAlarmsRequestBody:= "30"
endTimeListActiveOrHistoryAlarmsRequestBody:= int64(0)
startTimeListActiveOrHistoryAlarmsRequestBody:= int64(0)
request.Body = &model.ListActiveOrHistoryAlarmsRequestBody{
    Sort: sortbody,
    AlarmLevelIds: &listAlarmLevelIdsbody,
    Search: &searchListActiveOrHistoryAlarmsRequestBody,
    TimeRange: &timeRangeListActiveOrHistoryAlarmsRequestBody,
    EndTime: &endTimeListActiveOrHistoryAlarmsRequestBody,
    StartTime: &startTimeListActiveOrHistoryAlarmsRequestBody,
    WhetherCustomField: false,
}
response, err := client.ListActiveOrHistoryAlarms(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.

## Error Codes

See [Error Codes](#).

## 6.14.2 Deleting an Active Alarm

### Function

This API is used to delete an active alarm.

## Calling Method

For details, see [Calling APIs](#).

## URI

POST /v2/{project\_id}/{domain\_id}/lts/alarms/sql-alarm/clear

**Table 6-608** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
domain_id	Yes	String	Account ID. For details about how to obtain an account ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-609** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-610** Request body parameters

Parameter	Mandatory	Type	Description
events	Yes	Array of <a href="#">Event</a> objects	Topic information.

**Table 6-611** Event

Parameter	Mandatory	Type	Description
metadata	Yes	<a href="#">Metadata</a> object	Alarm information. Minimum length: 0 Maximum length: 2048
starts_at	Yes	Long	Alarm generation time (timestamp). Minimum: <b>0</b> Maximum: <b>32</b>

**Table 6-612** Metadata

Parameter	Mandatory	Type	Description
event_type	Yes	String	Alarm type. Minimum: <b>1</b> Maximum: <b>1024</b>
event_id	Yes	String	Alarm ID. Minimum: <b>1</b> Maximum: <b>1024</b>
event_severity	Yes	String	Alarm severity. Minimum: <b>1</b> Maximum: <b>1024</b>
event_name	Yes	String	Alarm name. Minimum: <b>1</b> Maximum: <b>1024</b>
resource_type	Yes	String	Resource type. Minimum: <b>1</b> Maximum: <b>1024</b>
resource_id	Yes	String	Log group/stream name. Minimum: <b>1</b> Maximum: <b>1024</b>

Parameter	Mandatory	Type	Description
resource_provider	Yes	String	Alarm source. Minimum: <b>1</b> Maximum: <b>1024</b>
lts_alarm_type	Yes	String	Alarm rule type (SQL/ keyword). Minimum: <b>1</b> Maximum: <b>100</b>
log_group_name	Yes	String	Original log group name.
log_stream_name	Yes	String	Original log stream name.

## Response Parameters

None

## Example Requests

Deleting an active alarm by alarm ID

POST https://{endpoint}/v2/{project\_id}/{domain\_id}/lts/alarms/sql-alarm/clear

```
{
  "events": [ {
    "metadata": {
      "event_type": "alarm",
      "event_id": "1",
      "lts_alarm_type": "keywords/sql",
      "resource_type": "Log group/stream.",
      "event_severity": "Critical",
      "resource_id": "lts-group-demo/lts-topic-demo",
      "event_name": "demo",
      "resource_provider": "LTS",
      "log_group_name": "lts-group-demo",
      "log_stream_name": "lts-topic-demo"
    },
    "starts_at": 1629947408497
  } ]
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Deleting an active alarm by alarm ID

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteActiveAlarmsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteActiveAlarmsRequest request = new DeleteActiveAlarmsRequest();
        request.withDomainId("domain_id");
        DeleteActiveAlarmsRequestBody body = new DeleteActiveAlarmsRequestBody();
        Metadata metadataEvents = new Metadata();
        metadataEvents.withEventType("alarm")
            .withEventId("1")
            .withEventSeverity("Critical")
            .withEventName("demo")
            .withResourceType("Log group/stream.")
            .withResourceId("lts-group-demo/lts-topic-demo")
            .withResourceProvider("LTS")
            .withLtsAlarmType("keywords/sql")
            .withLogGroupName("lts-group-demo")
            .withLogStreamName("lts-topic-demo");
        List<Event> listbodyEvents = new ArrayList<>();
        listbodyEvents.add(
            new Event()
                .withMetadata(metadataEvents)
                .withStartsAt(1629947408497L)
        );
        body.withEvents(listbodyEvents);
        request.withBody(body);
        try {
            DeleteActiveAlarmsResponse response = client.deleteActiveAlarms(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrMsg());
        }
    }
}
```



```
}  
}
```

## Python

### Deleting an active alarm by alarm ID

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsklts.v2.region.lts_region import LtsRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsklts.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
  
    credentials = BasicCredentials(ak, sk)  
  
    client = LtsClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = DeleteActiveAlarmsRequest()  
        request.domain_id = "{domain_id}"  
        metadataEvents = Metadata(  
            event_type="alarm",  
            event_id="1",  
            event_severity="Critical",  
            event_name="demo",  
            resource_type="Log group/stream",  
            resource_id="lts-group-demo/lts-topic-demo",  
            resource_provider="LTS",  
            lts_alarm_type="keywords/sql",  
            log_group_name="lts-group-demo",  
            log_stream_name="lts-topic-demo"  
        )  
        listEventsbody = [  
            Event(  
                metadata=metadataEvents,  
                starts_at=1629947408497  
            )  
        ]  
        request.body = DeleteActiveAlarmsRequestBody(  
            events=listEventsbody  
        )  
        response = client.delete_active_alarms(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

## Go

### Deleting an active alarm by alarm ID

```
package main
```

```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteActiveAlarmsRequest{}
    request.DomainId = "{domain_id}"
    logGroupNameMetadata:= "lts-group-demo"
    logStreamNameMetadata:= "lts-topic-demo"
    metadataEvents := &model.Metadata{
        EventType: "alarm",
        EventId: "1",
        EventSeverity: "Critical",
        EventName: "demo",
        ResourceType: "Log group/stream.",
        ResourceId: "lts-group-demo/lts-topic-demo",
        ResourceProvider: "LTS",
        LtsAlarmType: "keywords/sql",
        LogGroupName: &logGroupNameMetadata,
        LogStreamName: &logStreamNameMetadata,
    }
    var listEventsbody = []model.Event{
        {
            Metadata: metadataEvents,
            StartsAt: int64(1629947408497),
        },
    }
    request.Body = &model.DeleteActiveAlarmsRequestBody{
        Events: listEventsbody,
    }
    response, err := client.DeleteActiveAlarms(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	The request is successful.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.15 Tag Management

## 6.15.1 Creating a Tag

### Function

This API is used to create a tag.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v1/{project\_id}/{resource\_type}/{resource\_id}/tags/action

**Table 6-613** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
resource_type	Yes	String	Resource type. The value can be <b>groups</b> or <b>topics</b> .
resource_id	Yes	String	Resource ID.

## Request Parameters

**Table 6-614** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-615** Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Method of adding tags. Enumeration values: <ul style="list-style-type: none"> <li>• <b>create</b></li> <li>• <b>delete</b></li> </ul>
is_open	Yes	Boolean	Whether to call external APIs.
tags	Yes	Array of <a href="#">tagsBody</a> objects	Tag field information.

**Table 6-616** tagsBody

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
value	No	String	Tag value.

## Response Parameters

**Status code: 400**

**Table 6-617** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
error_msg	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-618** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
error_msg	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Creating a Tag

```
/v1/2a473356cca5487f8373be891bffc1cf/groups/0933a172-379e-44d0-9ed9-f491b1c528ea/tags/action
```

```
{
  "action": "create",
  "is_open": false,
  "tags": [{
    "key": "zzz",
    "value": "zzz"
  }, {
    "key": "sgq",
    "value": "123"
  }]
}
```

## Example Responses

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "error_code": "LTS.1836",
```

```
"error_msg" : "action is create or delete"  
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{  
  "error_code" : "LTS.0203",  
  "error_msg" : "Internal Server Error"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a Tag

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CreateTagsSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        LtsClient client = LtsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        CreateTagsRequest request = new CreateTagsRequest();  
        request.withResourceType("{resource_type}");  
        request.withResourceId("{resource_id}");  
        CreateTagsReqbody body = new CreateTagsReqbody();  
        List<TagsBody> listbodyTags = new ArrayList<>();  
        listbodyTags.add(  
            new TagsBody()  
                .withKey("zzz")  
                .withValue("zzz")  
        );  
        listbodyTags.add(  
            new TagsBody()
```

```
        .withKey("sgq")
        .withValue("123")
    );
    body.withTags(listbodyTags);
    body.withIsOpen(false);
    body.withAction(CreateTagsReqbody.ActionEnum.fromValue("create"));
    request.withBody(body);
    try {
        CreateTagsResponse response = client.createTags(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Creating a Tag

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateTagsRequest()
        request.resource_type = "{resource_type}"
        request.resource_id = "{resource_id}"
        listTagsbody = [
            TagsBody(
                key="zzz",
                value="zzz"
            ),
            TagsBody(
                key="sgq",
                value="123"
            )
        ]
        request.body = CreateTagsReqbody(
            tags=listTagsbody,
```

```
        is_open=False,  
        action="create"  
    )  
    response = client.create_tags(request)  
    print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

## Go

### Creating a Tag

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := lts.NewLtsClient(  
        lts.LtsClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.CreateTagsRequest{}  
    request.ResourceType = "{resource_type}"  
    request.ResourceId = "{resource_id}"  
    keyTags := "zzz"  
    valueTags := "zzz"  
    keyTags1 := "sgq"  
    valueTags1 := "123"  
    var listTagsbody = []model.TagsBody{  
        {  
            Key: &keyTags,  
            Value: &valueTags,  
        },  
        {  
            Key: &keyTags1,  
            Value: &valueTags1,  
        },  
    }  
    request.Body = &model.CreateTagsReqbody{  
        Tags: listTagsbody,  
        IsOpen: false,  
        Action: model.GetCreateTagsReqbodyActionEnum().CREATE,  
    }  
}
```



```
response, err := client.CreateTags(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	Tag added.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.16 Dashboard Management

## 6.16.1 Creating a Dashboard Group

### Function

This API is used to create a dashboard group.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/lts/dashboard-group

**Table 6-619** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-620** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-621** Request body parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Dashboard group name.

## Response Parameters

**Status code: 201**

**Table 6-622** Response body parameters

Parameter	Type	Description
result	String	Response result.

**Status code: 400**

**Table 6-623** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-624** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-625** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-626** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Creating a Dashboard Group

```
/v2/2a473356cca5487f8373be891bffc1cf/lts/dashboard-group  
  
{  
  "group_name" : "sgqtest"  
}
```

## Example Responses

### Status code: 201

Dashboard group created.

```
{  
  "result" : "success"  
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{  
  "message" : {  
    "code" : "LTS.2111",  
    "details" : "Log dashboard group name is already exist"  
  }  
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{  
  "message" : {  
    "code" : "LTS.0203",  
    "details" : "Internal Server Error"  
  }  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Creating a Dashboard Group

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
public class CreateDashboardGroupSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running
```

this example, set environment variables CLOUD\_SDK\_AK and CLOUD\_SDK\_SK in the local environment

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
CreateDashboardGroupRequest request = new CreateDashboardGroupRequest();
CreateDashboardGroupReq body = new CreateDashboardGroupReq();
body.withGroupName("sgqtest");
request.withBody(body);
try {
    CreateDashboardGroupResponse response = client.createDashboardGroup(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Creating a Dashboard Group

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateDashboardGroupRequest()
        request.body = CreateDashboardGroupReq(
            group_name="sgqtest"
        )
```

```
response = client.create_dashboard_group(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Creating a Dashboard Group

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateDashboardGroupRequest{}
    request.Body = &model.CreateDashboardGroupReq{
        GroupName: "sgqtest",
    }
    response, err := client.CreateDashboardGroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	Dashboard group created.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.16.2 Creating a Dashboard

### Function

This API is used to create a dashboard.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/dashboard

**Table 6-627** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

## Request Parameters

**Table 6-628** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-629** Request body parameters

Parameter	Mandatory	Type	Description
group_name	No	String	Dashboard group name.
title	Yes	String	Dashboard name.

## Response Parameters

**Status code: 201**

**Table 6-630** Response body parameters

Parameter	Type	Description
charts	Array of strings	Charts in the dashboard.
filters	Array of strings	Filter criteria.
group_name	String	Log group name.
id	String	Dashboard ID.
last_update_time	Long	Last modification time.
project_id	String	Project ID.
title	String	Dashboard name.
useSystemTemplate	Boolean	Whether to use the template.



Parameter	Type	Description
tags	Array of <a href="#">ResourceTag</a> objects	Dashboard tag.
concise_mode_enable	String	Lite mode switch.

**Table 6-631** ResourceTag

Parameter	Type	Description
key	String	Tag key.
value	String	Tag value.
tags_to_streams_enable	String	Whether to enable the log stream tag.

**Status code: 400**

**Table 6-632** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-633** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-634** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-635** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Parameters for creating a dashboard. group\_name is optional.

```
/v2/2a473356cca5487f8373be891bffc1cf/dashboard
{
  "group_name": "sgqtest",
  "title": "sgqtest1"
}
```

## Example Responses

### Status code: 201

Dashboard created.

```
{
  "charts": [],
  "filters": [],
  "group_name": "",
  "id": "2bf23310-83c2-4962-898f-79ebd057a256",
  "last_update_time": 1669637866189,
  "project_id": "2a473356cca5487f8373be891bffc1cf",
  "title": "test",
  "useSystemTemplate": false
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message": {
    "code": "LTS.0736",
    "details": "The number of log dashboards exceeds the maximum"
  }
}
```

```
}  
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{  
  "message" : {  
    "code" : "LTS.0203",  
    "details" : "Internal Server Error"  
  }  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Parameters for creating a dashboard. `group_name` is optional.

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
public class CreateDashBoardSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        LtsClient client = LtsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        CreateDashBoardRequest request = new CreateDashBoardRequest();  
        CreateDashBoardReqBody body = new CreateDashBoardReqBody();  
        body.withTitle("sgqtest1");  
        body.withGroupName("sgqtest");  
        request.withBody(body);  
        try {  
            CreateDashBoardResponse response = client.createDashBoard(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

Parameters for creating a dashboard. `group_name` is optional.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateDashBoardRequest()
        request.body = CreateDashBoardReqBody(
            title="sgqtest1",
            group_name="sgqtest"
        )
        response = client.create_dash_board(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Parameters for creating a dashboard. `group_name` is optional.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateDashBoardRequest{}
groupNameCreateDashBoardReqBody:= "sgqtest"
request.Body = &model.CreateDashBoardReqBody{
    Title: "sgqtest1",
    GroupName: &groupNameCreateDashBoardReqBody,
}
response, err := client.CreateDashBoard(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

### More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

### Status Codes

Status Code	Description
201	Dashboard created.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

### Error Codes

See [Error Codes](#).

## 6.17 Log Charts

## 6.17.1 Querying a Log Stream Chart

### Function

This API is used to query a log flow chart.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/groups/{log\_group\_id}/streams/{log\_stream\_id}/charts

**Table 6-636** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

**Table 6-637** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Query cursor. Set the value to 0 in the first query. In subsequent queries, obtain the value from the response to the last request. Minimum: <b>0</b> Maximum: <b>1024</b>
limit	No	Integer	Number of records on each page. The maximum value is 100. Minimum: <b>0</b> Maximum: <b>100</b>

## Request Parameters

**Table 6-638** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-639** Response body parameters

Parameter	Type	Description
id	String	id Minimum: <b>36</b> Maximum: <b>36</b>
sql	String	SQL statement. Minimum: <b>1</b> Maximum: <b>1024</b>
title	String	Chart name. Minimum: <b>1</b> Maximum: <b>64</b>
type	String	Chart type. Enumeration values: <ul style="list-style-type: none"> <li>• <b>table</b></li> <li>• <b>bar</b></li> <li>• <b>line</b></li> <li>• <b>pie</b></li> <li>• <b>number</b></li> </ul>
log_group_id	String	Log group ID. Minimum: <b>36</b> Maximum: <b>36</b>
log_group_name	String	Log group name. Minimum: <b>1</b> Maximum: <b>64</b>
log_stream_id	String	Log group ID. Minimum: <b>32</b> Maximum: <b>32</b>
log_stream_name	String	Log stream name. Minimum: <b>1</b> Maximum: <b>64</b>
config	<b>ChartConfig</b> object	Chart configuration details.

**Table 6-640** ChartConfig

Parameter	Type	Description
canSort	Boolean	Whether to enable sorting.



Parameter	Type	Description
canSearch	Boolean	Whether to enable search.
pageSize	Integer	Number of records on each page. Minimum: <b>0</b> Maximum: <b>100</b>

## Example Requests

Querying a log stream chart

```
GET https://{endpoint}/v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/charts
/v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/charts
```

## Example Responses

**Status code: 200**

The request is successful.

```
{
  "id" : "string",
  "sql" : "string",
  "title" : "string",
  "type" : "table",
  "log_group_id" : "string",
  "log_group_name" : "string",
  "log_stream_id" : "string",
  "log_stream_name" : "string",
  "config" : {
    "canSort" : true,
    "canSearch" : true,
    "pageSize" : 0
  }
}
```

## Status Codes

Status Code	Description
200	The request is successful.

## Error Codes

See [Error Codes](#).

## 6.18 Quick Search

## 6.18.1 Querying Historical SQL Statements

### Function

This API is used to query historical SQL statements.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/lts/history-sql

**Table 6-641** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>

**Table 6-642** Query Parameters

Parameter	Mandatory	Type	Description
log_group_id	Yes	String	Log group ID. For details about how to obtain a log group ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>
log_stream_id	Yes	String	Log stream ID. For details about how to obtain a log stream ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-643** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1</b> Maximum: <b>10000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 200**

**Table 6-644** Response body parameters

Parameter	Type	Description
results	Array of <a href="#">QuertHistorySQLResultsBody</a> objects	Response result.

**Table 6-645** QuertHistorySQLResultsBody

Parameter	Type	Description
last_use_time	Long	Last modification time. The value is a timestamp, in milliseconds.
sql_statement	String	Historical SQL statements.

**Status code: 400**

**Table 6-646** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-647** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-648** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-649** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

### Querying Historical SQL Statements

```
/v2/2a473356cca5487f8373be891bffc1cf/lts/history-sql?log_group_id=d1f4240d-5ee2-4e0b-9e2c-e25c7978c001&log_stream_id=f3d853be-0576-4dff-ae9-c093e4924b63
```

## Example Responses

### Status code: 200

SQL statements queried.

```
{
  "results": [ {
    "last_use_time": 1669689650936,
    "sql_statement": "SELECT *"
  }, {
    "last_use_time": 1666775421613,
    "sql_statement": "select count(\"t\") as pv"
  }, {
    "last_use_time": 1666661494805,
    "sql_statement": "SELECT count(\"time\")"
  }, {
    "last_use_time": 1666598233252,
    "sql_statement": "SELECT count(\"t\") as pv"
  }, {
    "last_use_time": 1666598226763,
    "sql_statement": "SELECT count(\"t\") "
  }, {
    "last_use_time": 1666598222298,
    "sql_statement": "SELECT count(\"t\") as pv"
  }, {
    "last_use_time": 1666598221585,
    "sql_statement": "SELECT count(\"t\") as p"
  }, {
    "last_use_time": 1666598220276,
    "sql_statement": "SELECT count(\"t\") as "
  }, {
    "last_use_time": 1666598212453,
    "sql_statement": "SELECT count(\"t\")"
  }
]
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message": {
    "code": "LTS.0603",
    "details": "group or stream not exist"
  }
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "message": {
    "code": "LTS.0203",
    "details": "Internal Server Error"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListHistorySqlSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListHistorySqlRequest request = new ListHistorySqlRequest();
        try {
            ListHistorySqlResponse response = client.listHistorySql(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"
```

```
credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ListHistorySqlRequest()
    response = client.list_history_sql(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListHistorySqlRequest{}
    response, err := client.ListHistorySql(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	SQL statements queried.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.18.2 Adding a Quick Search

### Function

Adding a Quick Search

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v1.0/{project\_id}/groups/{group\_id}/topics/{topic\_id}/search-criterias

**Table 6-650** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
group_id	Yes	String	ID of the log group whose log streams will be queried. Generally, it contains 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>
topic_id	Yes	String	Log stream ID.



## Request Parameters

**Table 6-651** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to application/json;charset=UTF-8. No default value. Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-652** Request body parameters

Parameter	Mandatory	Type	Description
criteria	Yes	String	Quick search of a field.
eps_id	No	String	Enterprise project ID.
name	Yes	String	Create a quick search name.
search_type	Yes	String	Search type. Raw logs: <b>ORIGINALLOG</b> . Visualized logs: <b>VISUALIZATION</b>

## Response Parameters

Status code: 201

**Table 6-653** Response body parameters

Parameter	Type	Description
id	String	Quick search ID.

**Status code: 400**

**Table 6-654** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-655** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-656** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-657** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Adding a Quick Search

```
/v1.0/2a47335cca5487f8373be891bffc1cf/groups/d1f4240d-5ee2-4e0b-9e2c-e25c7978c001/topics/2b899d46-218c-4f0c-8ace-a36a290a83a0/search-criterias
{
  "name" : "Creating a Number",
  "criteria" : "content : 1234567891234567891234567891234567891234567891234567891234567894",
  "eps_id" : "0",
  "search_type" : "ORIGINALLOG"
}
```

## Example Responses

### Status code: 201

Quick search added.

```
{
  "id" : "0eb379f5-f847-4d25-ba89-05967bf1bae3"
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message" : {
    "code" : "LTS.0208",
    "details" : "The log stream does not existed"
  }
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{
  "message" : {
    "code" : "LTS.0203",
    "details" : "Internal Server Error"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Adding a Quick Search

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class CreateSearchCriteriasSolution {

    public static void main(String[] args) {
```



```
client = LtsClient.new_builder() \  
  .with_credentials(credentials) \  
  .with_region(LtsRegion.value_of("<YOUR REGION>")) \  
  .build()  
  
try:  
  request = CreateSearchCriteriaRequest()  
  request.group_id = "{group_id}"  
  request.topic_id = "{topic_id}"  
  request.body = CreateSearchCriteriaBody(  
    search_type="ORIGINALLOG",  
    name="Creating a Number",  
    eps_id="0",  
    criteria="content : 1234567891234567891234567891234567891234567891234567891234567894"  
  )  
  response = client.create_search_criteria(request)  
  print(response)  
except exceptions.ClientRequestException as e:  
  print(e.status_code)  
  print(e.request_id)  
  print(e.error_code)  
  print(e.error_msg)
```

## Go

### Adding a Quick Search

```
package main  
  
import (  
  "fmt"  
  "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
  lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"  
  "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"  
  region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"  
)  
  
func main() {  
  // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
  risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
  variables and decrypted during use to ensure security.  
  // In this example, AK and SK are stored in environment variables for authentication. Before running this  
  example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
  ak := os.Getenv("CLOUD_SDK_AK")  
  sk := os.Getenv("CLOUD_SDK_SK")  
  projectId := "{project_id}"  
  
  auth := basic.NewCredentialsBuilder().  
    WithAk(ak).  
    WithSk(sk).  
    WithProjectId(projectId).  
    Build()  
  
  client := lts.NewLtsClient(  
    lts.LtsClientBuilder().  
      WithRegion(region.ValueOf("<YOUR REGION>")).  
      WithCredential(auth).  
      Build())  
  
  request := &model.CreateSearchCriteriaRequest{}  
  request.GroupId = "{group_id}"  
  request.TopicId = "{topic_id}"  
  epsIdCreateSearchCriteriaBody := "0"  
  request.Body = &model.CreateSearchCriteriaBody{  
    SearchType: "ORIGINALLOG",  
    Name: "Creating a Number",  
    EpsId: &epsIdCreateSearchCriteriaBody,  
    Criteria: "content : 1234567891234567891234567891234567891234567891234567891234567894",  
  }  
}
```

```
response, err := client.CreateSearchCriteria(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
201	Quick search added.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.18.3 Obtaining a Quick Search

### Function

This API is used to obtain quick search.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v1.0/{project\_id}/groups/{group\_id}/topics/{topic\_id}/search-criterias

**Table 6-658** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
group_id	Yes	String	ID of the log group whose log streams will be queried. Generally, it contains 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>
topic_id	Yes	String	Log stream ID.

**Table 6-659** Query Parameters

Parameter	Mandatory	Type	Description
search_type	No	String	Raw logs: ORIGINALLOG Visualized logs: VISUALIZATION

## Request Parameters

**Table 6-660** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 200**

**Table 6-661** Response body parameters

Parameter	Type	Description
search_criterias	Array of <a href="#">GetQuerySearchCriteriasBody</a> objects	Response body.

**Table 6-662** GetQuerySearchCriteriasBody

Parameter	Type	Description
criteria	String	Quick search of a field.
name	String	Quick search of a name.
id	String	Quick search ID.
search_type	String	Quick query type. Raw logs: <b>ORIGINALLOG</b> Visualized logs: <b>VISUALIZATION</b>

**Status code: 400**

**Table 6-663** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-664** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>



**Status code: 500**

**Table 6-665** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-666** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

### Obtaining a Quick Search

```
/v1.0/2a473356cca5487f8373be891bffc1cf/groups/d1f4240d-5ee2-4e0b-9e2c-e25c7978c001/topics/2b899d46-218c-4f0c-8ace-a36a290a83a0/search-criterias?search_type=ORIGINALLOG
search_type:
ORIGINALLOG
```

## Example Responses

### Status code: 200

Quick search obtained.

```
{
  "search_criterias" : [ {
    "criteria" : "content : 1234567891234567891234567891234567891234567891234567891234567894",
    "name" : "Creating a Number",
    "id" : "0eb379f5-f847-4d25-ba89-05967bf1bae3",
    "search_type" : "ORIGINALLOG"
  } ]
}
```

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message" : {
    "code" : "LTS.0208",
    "details" : "The log stream does not existed"
  }
}
```

```
}  
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{  
  "error_code" : "LTS.0203",  
  "error_msg" : "Internal Server Error"  
}
```

## Status Codes

Status Code	Description
200	Quick search obtained.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.18.4 Deleting a Quick Search

### Function

This API is used to delete a quick search.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v1.0/{project\_id}/groups/{group\_id}/topics/{topic\_id}/search-criterias

**Table 6-667** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>
group_id	Yes	String	ID of the log group whose log streams will be queried. Generally, it contains 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>
topic_id	Yes	String	Log stream ID.

## Request Parameters

**Table 6-668** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

**Table 6-669** Request body parameters

Parameter	Mandatory	Type	Description
eps_id	No	String	Enterprise project ID.
id	Yes	String	Quick search ID.

## Response Parameters

**Status code: 400**

**Table 6-670** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-671** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-672** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-673** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

### Querying a Quick Search

```
/v1.0/2a473356cca5487f8373be891bffc1cf/groups/d1f4240d-5ee2-4e0b-9e2c-e25c7978c001/topics/2b899d46-218c-4f0c-8ace-a36a290a83a0/search-criterias  
  
{  
  "id" : "345d2276-1ae8-4495-a6ee-bf77c2e5ffb9",  
  "epsid" : "0"  
}
```

## Example Responses

### Status code: 204

Quick search deleted.

### Status code: 400

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{  
  "message" : {  
    "code" : "LTS.0208",  
    "details" : "The log stream does not existed"  
  }  
}
```

### Status code: 500

The server has received the request but encountered an internal error.

```
{  
  "message" : {  
    "code" : "LTS.0203",  
    "details" : "Internal Server Error"  
  }  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Querying a Quick Search

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;  
import com.huaweicloud.sdk.lts.v2.*;  
import com.huaweicloud.sdk.lts.v2.model.*;  
  
public class DeleteSearchCriteriasSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    LtsClient client = LtsClient.newBuilder()
        .withCredential(auth)
        .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
        .build();
    DeleteSearchCriteriaRequest request = new DeleteSearchCriteriaRequest();
    request.withGroupId("{group_id}");
    request.withTopicId("{topic_id}");
    DeleteSearchCriteria body = new DeleteSearchCriteria();
    body.withId("345d2276-1ae8-4495-a6ee-bf77c2e5ffb9");
    request.withBody(body);
    try {
        DeleteSearchCriteriaResponse response = client.deleteSearchCriteria(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrMsg());
    }
}
```

## Python

### Querying a Quick Search

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
```

```
.build()

try:
    request = DeleteSearchCriteriaRequest()
    request.group_id = "{group_id}"
    request.topic_id = "{topic_id}"
    request.body = DeleteSearchCriteriaRequest(
        id="345d2276-1ae8-4495-a6ee-bf77c2e5ffb9"
    )
    response = client.delete_search_criteria(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Querying a Quick Search

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewLtsClient(
        lts.LtsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteSearchCriteriaRequest{
        GroupId: "{group_id}"
        TopicId: "{topic_id}"
        Body: &model.DeleteSearchCriteriaRequest{
            Id: "345d2276-1ae8-4495-a6ee-bf77c2e5ffb9",
        }
    }
    response, err := client.DeleteSearchCriteria(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
204	Quick search deleted.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

## 6.18.5 Querying All Quick Searches in a Log Group

### Function

This API is used to query all quick searches in a log group.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v1.0/{project\_id}/lts/groups/{group\_id}/search-criterias

**Table 6-674** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> . Minimum: <b>32</b> Maximum: <b>32</b>



Parameter	Mandatory	Type	Description
group_id	Yes	String	ID of the log group whose log streams will be queried. Generally, it contains 36 characters. Minimum: <b>36</b> Maximum: <b>36</b>

## Request Parameters

**Table 6-675** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> . Minimum: <b>1000</b> Maximum: <b>2000</b>
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> . Minimum: <b>30</b> Maximum: <b>30</b>

## Response Parameters

Status code: 200

**Table 6-676** Response body parameters

Parameter	Type	Description
search_criterias	Array of <a href="#">search_criteriasBody</a> objects	Quick search.

**Table 6-677** search\_criteriasBody

Parameter	Type	Description
criteria	Array of <a href="#">GetQuerySearchCriteriaBody</a> objects	Quick search of a single log stream.
log_stream_id	String	Log stream ID.
log_stream_name	String	Log stream name.

**Table 6-678** GetQuerySearchCriteriaBody

Parameter	Type	Description
criteria	String	Quick search of a field.
name	String	Quick search of a name.
id	String	Quick search ID.
search_type	String	Quick query type. Raw logs: <b>ORIGINALLOG</b> Visualized logs: <b>VISUALIZATION</b>

**Status code: 400**

**Table 6-679** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-680** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 6-681** Response body parameters

Parameter	Type	Description
message	<a href="#">ErrorMessagebody</a> object	Error message body.

**Table 6-682** ErrorMessagebody

Parameter	Type	Description
code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
details	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Querying All Quick Searches in a Log Group

```
/v1.0/2a473356cca5487f8373be891bffc1cf/lts/groups/d1f4240d-5ee2-4e0b-9e2c-e25c7978c001/search-criterias
```

## Example Responses

**Status code: 200**

Obtained.

```
{
  "search_criterias" : [ {
    "criterias" : [ {
      "criteria" : "234",
      "name" : "234",
      "id" : "aee53496-xxxx-xxxx-xxxx-5a83d1aae134",
      "search_type" : "ORIGINALLOG"
    }, {
      "criteria" : "24",
      "name" : "2342",
      "id" : "939c930a-xxxx-xxxx-xxxx-a3040d857ce1",
      "search_type" : "ORIGINALLOG"
    }
  ],
  "log_stream_id" : "85025a4b-xxxx-xxxx-xxxx-2b6851d84ea2",
  "log_stream_name" : "lts-test-topic",
  "search_type" : "ORIGINALLOG"
} ] }
```

**Status code: 400**

Invalid request. Modify the request based on the description in **error\_msg** before a retry.

```
{
  "message" : {
    "code" : "LTS.0201",
    "details" : "The log group does not existed"
  }
}
```

**Status code: 500**

The server has received the request but encountered an internal error.

```
{
  "message" : {
    "code" : "LTS.0203",
    "details" : "Internal Server Error"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

public class ListQueryAllSearchCriteriaSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        LtsClient client = LtsClient.newBuilder()
            .withCredential(auth)
            .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListQueryAllSearchCriteriaRequest request = new ListQueryAllSearchCriteriaRequest();
        request.withGroupId("{group_id}");
        try {
            ListQueryAllSearchCriteriaResponse response = client.listQueryAllSearchCriteria(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        }
    }
}
```

```
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = LtsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(LtsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListQueryAllSearchCriteriaRequest()
        request.group_id = "{group_id}"
        response = client.list_query_all_search_criteria(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
```

```
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListQueryAllSearchCriteriaRequest{}
request.GroupId = "{group_id}"
response, err := client.ListQueryAllSearchCriteria(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Obtained.
400	Invalid request. Modify the request based on the description in <b>error_msg</b> before a retry.
500	The server has received the request but encountered an internal error.

## Error Codes

See [Error Codes](#).

# 6.19 Multi-Account Log Aggregation

## 6.19.1 Obtaining the Log Aggregation Switch Status

### Function

This API can be called only by administrators or delegated administrators to obtain the status of the log aggregation switch.

## Calling Method

For details, see [Calling APIs](#).

## URI

GET /v1/{project\_id}/lts/log-converge-config/switch

**Table 6-683** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> .

## Request Parameters

**Table 6-684** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> .
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=utf8</b> .

## Response Parameters

**Status code: 200**

**Table 6-685** Response body parameters

Parameter	Type	Description
log_converge_switch	Boolean	Log aggregation switch.

**Status code: 400**

**Table 6-686** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
error_msg	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Obtain the log aggregation switch status.

```
GET https://{endpoint}/v1/{project_id}/lts/log-converge-config/switch
/v1/{project_id}/lts/log-converge-config/switch
```

## Example Responses

**Status code: 200**

Query succeeded.

```
{
  "log_converge_switch" : true
}
```

## Status Codes

Status Code	Description
200	Query succeeded.
400	Error response

## Error Codes

See [Error Codes](#).

## 6.19.2 Modifying the Log Aggregation Switch Status

### Function

This API can be called only by administrators or delegated administrators to modify the status of the log aggregation switch.



## Calling Method

For details, see [Calling APIs](#).

## URI

PUT /v1/{project\_id}/lts/log-converge-config/switch

**Table 6-687** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> .

**Table 6-688** Query Parameters

Parameter	Mandatory	Type	Description
log_converge_switch	Yes	String	Switch parameters

## Request Parameters

**Table 6-689** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> .
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=utf8</b> .

## Response Parameters

Status code: 200

**Table 6-690** Response body parameters

Parameter	Type	Description
result	String	Result of modifying the log aggregation switch

**Status code: 400**

**Table 6-691** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
error_msg	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Log aggregation is enabled.

```
PUT https://{endpoint}/v1/{project_id}/lts/log-converge-config/switch
/v1/{project_id}/lts/log-converge-config/switch?log_converge_switch=true
```

## Example Responses

**Status code: 200**

Response body for modifying the log aggregation switch

```
{
  "result" : "success"
}
```

## Status Codes

Status Code	Description
200	Response body for modifying the log aggregation switch
400	Error response

## Error Codes

See [Error Codes](#).

## 6.19.3 Obtaining the Aggregation Settings of an Organization Member

### Function

This API can be called only by organization administrators or delegated administrators to obtain the aggregation settings of an organization member.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v1/{project\_id}/lts/log-converge-config/{member\_account\_id}

**Table 6-692** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> .
member_account_id	Yes	String	Member account ID.

### Request Parameters

**Table 6-693** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> .
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> .

## Response Parameters

Status code: 200

**Table 6-694** Response body parameters

Parameter	Type	Description
id	String	ID
member_account_id	String	Account ID of an organization member.
member_project_id	String	Project ID of an administrator or delegated administrator.
create_time	Long	Creation time.
update_time	Long	Update time.
status	String	<b>creating</b> : The configuration is being created. <b>done</b> : The configuration has been created. Enumeration values: <ul style="list-style-type: none"> <li>• <b>creating</b></li> <li>• <b>done</b></li> </ul>
organization_id	String	Organization ID.
management_account_id	String	Account ID of an administrator or delegated administrator.
management_project_id	String	Administrator project ID.
version	String	Version.
log_mapping_config	Array of <a href="#">LogMappingConfig</a> objects	Log aggregation configuration.

**Table 6-695** LogMappingConfig

Parameter	Type	Description
source_log_group_id	String	Source log group ID.
target_log_group_id	String	Target log group ID.
target_log_group_name	String	Target log group name.

Parameter	Type	Description
log_stream_config	Array of <a href="#">LogMappingStreamInfo</a> objects	Log stream configuration.

**Table 6-696** LogMappingStreamInfo

Parameter	Type	Description
source_log_stream_id	String	Source log stream ID.
target_log_stream_id	String	Target log stream ID.
target_log_stream_name	String	Target log stream name.
target_log_stream_eps_id	String	Target log stream EPS ID.
target_log_stream_ttl	Integer	Time to live (TTL) storage duration of the target log stream, in days. Minimum: <b>1</b> Maximum: <b>30</b>

**Status code: 400**

**Table 6-697** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
error_msg	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Obtain the aggregation settings of an organization member.

```
GET https://{endpoint}/v1/{project_id}/lts/log-converge-config/{member_account_id}
/v1/{project_id}/lts/log-converge-config/{member_account_id}
```

## Example Responses

### Status code: 200

Delete result

```
{
  "create_time": 1694423493108,
  "id": "f5b6b235-48a2-473c-a1fa-4ddba9ca86d8",
  "log_mapping_config": [ {
    "log_stream_config": [ {
      "source_log_stream_id": "55b33967-1971-4521-bf5a-e53e981f3d08",
      "target_log_stream_eps_id": "0",
      "target_log_stream_id": "ebaf8e21-dba6-4697-99b2-6811f109d03f",
      "target_log_stream_name": "stdout-test_huiju",
      "target_log_stream_ttl": 180
    } ],
    "source_log_group_id": "c59e2705-5bbf-4f55-8861-92d4e7e7d33f",
    "target_log_group_id": "5adb3025-e663-4cf4-bcf7-7340e79cdbd3",
    "target_log_group_name": "k8s-log-test_paas_apm_z0041xxxx_01"
  } ], {
    "log_stream_config": [ {
      "source_log_stream_id": "b77c9164-b411-42f4-9d4c-2ca7115496b7",
      "target_log_stream_eps_id": "0",
      "target_log_stream_id": "7120856a-bf15-4f92-8f08-b64bba8c81b1",
      "target_log_stream_name": "stdout-test_huiju",
      "target_log_stream_ttl": 180
    } ],
    "source_log_group_id": "77f7e0fc-0ad0-4af0-b1e9-198007d5f993",
    "target_log_group_id": "f8076177-c903-4dcf-85d5-dca9d13e591e",
    "target_log_group_name": "k8s-log-stest_paas_apm_z0041xxxx_01"
  } ],
  "management_account_id": "115ba1c5fec44839820795ebefe25f2a",
  "management_project_id": "a5baef478e6840dc9f454bbc00c996c6",
  "member_account_id": "1d26cc8c86a840e28a4f8d0d07852f1d",
  "member_project_id": "2a473356cca5487f8373be891bffc1cf",
  "organization_id": "o-fa9h4ghf0hnpfnq4xd02tah2nxmtugrf",
  "status": "done"
}
```

### Status code: 400

Error response

```
""
```

## Status Codes

Status Code	Description
200	Delete result
400	Error response

## Error Codes

See [Error Codes](#).

## 6.19.4 Obtaining the Log Groups and Log Streams of an Organization Member

### Function

This API can be called only by administrators or delegated administrators to obtain the log groups and log streams of an organization member.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v1/{project\_id}/lts/{member\_account\_id}/all-streams

**Table 6-698** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> .
member_account_id	Yes	String	Member account ID.

### Request Parameters

**Table 6-699** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> .
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> .

### Response Parameters

**Status code: 200**

**Table 6-700** Response body parameters

Parameter	Type	Description
results	Array of <b>results</b> objects	Result of obtaining the log groups and log streams of an organization member

**Table 6-701** results

Parameter	Type	Description
log_group_id	String	Log group ID.
log_group_name	String	Log group name.
log_streams	Array of <b>log_streams</b> objects	Log stream.

**Table 6-702** log\_streams

Parameter	Type	Description
log_stream_name	String	Log stream name.
log_stream_id	String	Log stream ID.

**Status code: 400**

**Table 6-703** Response body parameters

Parameter	Type	Description
error_code	String	Error code. Minimum: <b>8</b> Maximum: <b>36</b>
error_msg	String	Error description. Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

```
GET https://{endpoint}/v1/{project_id}/lts/{member_account_id}/all-streams
/v1/{project_id}/lts/{member_account_id}/all-streams
```



## Example Responses

**Status code: 200**

Log groups and log streams of an organization member

```
{
  "results": [ {
    "log_group_name": "cuiss",
    "log_streams": [ {
      "log_stream_name": "wjyTest",
      "log_stream_id": "d67124ed-b4bd-4d89-8646-5905c2eeaa62"
    } ],
    "log_group_id": "d6c04fe9-170a-4d98-94e6-7844f47bd0b8"
  } ]
}
```

## Status Codes

Status Code	Description
200	Log groups and log streams of an organization member
400	Error response

## Error Codes

See [Error Codes](#).

## 6.19.5 Updating Aggregation Configurations

### Function

This API can be called only by administrators or delegated administrators to update aggregation configurations.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v1/{project\_id}/lts/log-converge-config

**Table 6-704** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain a project ID, see <a href="#">Obtaining the Project ID, Account ID, Log Group ID, and Log Stream ID</a> .

## Request Parameters

**Table 6-705** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details about how to obtain a user token, see <a href="#">Obtaining a User Token</a> .
Content-Type	Yes	String	Set this parameter to <b>application/json;charset=UTF-8</b> .

**Table 6-706** Request body parameters

Parameter	Mandatory	Type	Description
id	No	String	ID
member_account_id	Yes	String	Account ID of an organization member.
member_project_id	No	String	Project ID of an organization member.
create_time	No	Long	Creation time.
update_time	No	Long	Update time.
status	No	String	Status.
organization_id	Yes	String	Organization ID.
management_account_id	Yes	String	Account ID of an administrator or delegated administrator.
management_project_id	Yes	String	Project ID of an administrator or delegated administrator.
version	No	String	Version.
log_mapping_config	No	Array of <a href="#">LogMapping Config</a> objects	Log aggregation configuration.

**Table 6-707** LogMappingConfig

Parameter	Mandatory	Type	Description
source_log_group_id	Yes	String	Source log group ID.
target_log_group_id	No	String	Target log group ID.
target_log_group_name	Yes	String	Target log group name.
log_stream_config	No	Array of <a href="#">LogMappingStreamInfo</a> objects	Log stream configuration.

**Table 6-708** LogMappingStreamInfo

Parameter	Mandatory	Type	Description
source_log_stream_id	Yes	String	Source log stream ID.
target_log_stream_id	No	String	Target log stream ID.
target_log_stream_name	Yes	String	Target log stream name.
target_log_stream_eps_id	No	String	Target log stream EPS ID.
target_log_stream_ttl	Yes	Integer	Time to live (TTL) storage duration of the target log stream, in days. Minimum: <b>1</b> Maximum: <b>30</b>

## Response Parameters

**Status code: 200**

**Table 6-709** Response body parameters

Parameter	Type	Description
status	String	Update log aggregation configurations.

## Example Requests

```
PUT https://{endpoint}/v1/{project_id}/lts/log-converge-config
{
  "management_account_id" : "115ba1c5fec44839820795ebefe25f2a",
  "management_project_id" : "a5baef478e6840dc9f454bbc00c996c6",
  "organization_id" : "o-fa9h4ghf0hnpfnq4xd02tah2nxtugrf",
  "member_account_id" : "1d26cc8c86a840e28a4f8d0d07852f1d",
  "log_mapping_config" : [ {
    "source_log_group_id" : "21845482-07fc-440c-a26a-840e6cb12289",
    "target_log_group_id" : "",
    "target_log_group_name" : "lts-xxx_xx-xxx-test",
    "log_stream_config" : [ {
      "source_log_stream_id" : "72ece92e-af01-4216-aaa7-6df7a66465c7",
      "target_log_stream_eps_id" : "0",
      "target_log_stream_id" : "",
      "target_log_stream_name" : "lts_xxx_xxx_xxx_xxx",
      "target_log_stream_ttl" : 180
    } ]
  } ]
}
```

## Example Responses

**Status code: 200**

Response body for updating aggregation configurations

```
{
  "status" : "creating"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.lts.v2.region.LtsRegion;
import com.huaweicloud.sdk.lts.v2.*;
import com.huaweicloud.sdk.lts.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateLogConvergeConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
```

```
.withAk(ak)
.withSk(sk);

LtsClient client = LtsClient.newBuilder()
    .withCredential(auth)
    .withRegion(LtsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateLogConvergeConfigRequest request = new UpdateLogConvergeConfigRequest();
UpdateLogConvergeConfig body = new UpdateLogConvergeConfig();
List<LogMappingStreamInfo> listLogMappingConfigLogStreamConfig = new ArrayList<>();
listLogMappingConfigLogStreamConfig.add(
    new LogMappingStreamInfo()
        .withSourceLogStreamId("72ece92e-af01-4216-aaa7-6df7a66465c7")
        .withTargetLogStreamId("")
        .withTargetLogStreamName("lts_XXX_XXX_XXX_XXX")
        .withTargetLogStreamEpsId("0")
        .withTargetLogStreamTtl(180)
);
List<LogMappingConfig> listbodyLogMappingConfig = new ArrayList<>();
listbodyLogMappingConfig.add(
    new LogMappingConfig()
        .withSourceLogGroupId("21845482-07fc-440c-a26a-840e6cb12289")
        .withTargetLogGroupId("")
        .withTargetLogGroupName("lts-xxx_xx-xxx-test")
        .withLogStreamConfig(listLogMappingConfigLogStreamConfig)
);
body.withLogMappingConfig(listbodyLogMappingConfig);
body.withManagementProjectId("a5baef478e6840dc9f454bbc00c996c6");
body.withManagementAccountId("115ba1c5fec44839820795ebefe25f2a");
body.withOrganizationId("o-fa9h4ghf0hnpfnq4xd02tah2nxmtugrf");
body.withMemberAccountId("1d26cc8c86a840e28a4f8d0d07852f1d");
request.withBody(body);
try {
    UpdateLogConvergeConfigResponse response = client.updateLogConvergeConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsklts.v2.region.lts_region import LtsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsklts.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"
```

```
credentials = BasicCredentials(ak, sk, projectId)

client = LtsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(LtsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = UpdateLogConvergeConfigRequest()
    listLogStreamConfigLogMappingConfig = [
        LogMappingStreamInfo(
            source_log_stream_id="72ece92e-af01-4216-aaa7-6df7a66465c7",
            target_log_stream_id="",
            target_log_stream_name="lts_xxx_xxx_xxx_xxx",
            target_log_stream_eps_id="0",
            target_log_stream_ttl=180
        )
    ]
    listLogMappingConfigbody = [
        LogMappingConfig(
            source_log_group_id="21845482-07fc-440c-a26a-840e6cb12289",
            target_log_group_id="",
            target_log_group_name="lts-xxx_xx-xxx-test",
            log_stream_config=listLogStreamConfigLogMappingConfig
        )
    ]
    request.body = UpdatelogConvergeConfig(
        log_mapping_config=listLogMappingConfigbody,
        management_project_id="a5baef478e6840dc9f454bbc00c996c6",
        management_account_id="115ba1c5fec44839820795ebefe25f2a",
        organization_id="o-fa9h4ghf0hnpfnq4xd02tah2nxmtugrf",
        member_account_id="1d26cc8c86a840e28a4f8d0d07852f1d"
    )
    response = client.update_log_converge_config(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    lts "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/lts/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := lts.NewClient(region.HuaweiCloudRegion, auth)

    // ...
```

```
client := lts.NewLtsClient(
    lts.LtsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateLogConvergeConfigRequest{
    targetLogStreamIdLogStreamConfig:= ""
    targetLogStreamEpsIdLogStreamConfig:= "0"
    var listLogStreamConfigLogMappingConfig = []model.LogMappingStreamInfo{
        {
            SourceLogStreamId: "72ece92e-af01-4216-aaa7-6df7a66465c7",
            TargetLogStreamId: &targetLogStreamIdLogStreamConfig,
            TargetLogStreamName: "lts_XXX_XXX_XXX_XXX",
            TargetLogStreamEpsId: &targetLogStreamEpsIdLogStreamConfig,
            TargetLogStreamTtl: int32(180),
        },
    }
    targetLogGroupIdLogMappingConfig:= ""
    var listLogMappingConfigbody = []model.LogMappingConfig{
        {
            SourceLogGroupId: "21845482-07fc-440c-a26a-840e6cb12289",
            TargetLogGroupId: &targetLogGroupIdLogMappingConfig,
            TargetLogGroupName: "lts-xxx_xx-xxx-test",
            LogStreamConfig: &listLogStreamConfigLogMappingConfig,
        },
    }
    request.Body = &model.UpdatelogConvergeConfig{
        LogMappingConfig: &listLogMappingConfigbody,
        ManagementProjectId: "a5baef478e6840dc9f454bbc00c996c6",
        ManagementAccountId: "115ba1c5fec44839820795ebefe25f2a",
        OrganizationId: "o-fa9h4ghf0hnpfnq4xd02tah2nxmtugrf",
        MemberAccountId: "1d26cc8c86a840e28a4f8d0d07852f1d",
    }
    response, err := client.UpdateLogConvergeConfig(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response body for updating aggregation configurations

## Error Codes

See [Error Codes](#).

# 7 Permissions Policies and Supported Actions

---

This section describes fine-grained permissions management for your LTS. If your account does not require IAM users, you can skip this section.

By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permissions policies or roles to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services based on the permissions.

You can grant users permissions by using [roles](#) and [policies](#). Roles are a type of coarse-grained authorization mechanism that defines service-level permissions based on user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

## NOTE

You can use policies to allow or deny access to specific APIs.

An account has all of the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API. For example, if an IAM user queries log metrics using an API, the user must have been granted permissions that allow the **aom:metric:get** action.

## Supported Actions

LTS provides system-defined policies that can be directly used. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Operations supported by policies are specific to APIs. The following are basic concepts related to policies:

- Permissions: Statements in a policy that allow or deny certain operations.
- APIs: REST APIs that can be called by users with the required permissions.
- Actions: Specific operations that are allowed or denied.



- Related actions: Actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the related actions.
- IAM or enterprise projects: Type of projects for which permissions can be granted. Policies that contain actions for both IAM and enterprise projects take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects take effect only for IAM. For details about the differences between IAM and enterprise projects, see [What Are the Differences Between IAM and Enterprise Management](#).

 NOTE

The check mark (√) and cross symbol (x) respectively indicate that a permission can be or cannot be granted for the corresponding type of projects.

Permissi on	API	Action	Related Action	IA M Pr oje ct	Enterp rise Projec t
Creating a log group	POST /v2/{project_id}/groups	lts:groups:create	-	√	x
Querying all log groups of an account	GET /v2/{project_id}/groups	lts:groups:list	-	√	x
Modifying a log group	POST /v2/{project_id}/groups/{log_group_id}	lts:groups:put	-	√	x
Deleting a log group	DELETE /v2/{project_id}/groups/{log_group_id}	lts:groups:delete	-	√	x
Creating a log stream	POST /v2/{project_id}/groups/{log_group_id}/streams	lts:topics:create	-	√	√
Querying all log streams in a specified log group	GET /v2/{project_id}/groups/{log_group_id}/streams	lts:topics:list	-	√	√

Permissi on	API	Action	Related Action	IA M Pr oje ct	Enterp rise Projec t
Deleting a log stream	DELETE /v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}	lts:topics:delete	-	√	√
Querying logs	POST /v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/content/query	lts:logs:list	-	√	x
Querying structured logs	POST /v2/{project_id}/groups/{log_group_id}/streams/{log_stream_id}/struct-content/query	lts:logs:list	-	√	x
Transferring logs to OBS	POST /v2/{project_id}/log-dump/obs	lts:transfer:s:create	obs:bucket:CreateBucket obs:bucket:HeadBucket obs:bucket:GetLifecycleConfiguration obs:bucket:PutLifecycleConfiguration obs:bucket:GetBucketAcl obs:bucket:PutBucketAcl	√	x
Disabling log collection beyond free quota	POST /v2/{project_id}/collection/disable	aom:quota:set	-	√	x

Permissi on	API	Action	Related Action	IA M Pr oje ct	Enterp rise Projec t
Enabling log collection beyond free quota	POST /v2/{project_id}/collection/enable	aom:quota:set	-	√	x

# 8 Appendix

## 8.1 Status Codes

**Table 1** lists the status codes.

**Table 8-1** Status codes

Status Code	Returned Value	Description
200	OK	The normal response for the GET or PUT operation is returned.
201	OK	The POST request is successful and the query result is returned.
204	No Content	The normal response for the DELETE operation is returned.
400	Bad Request	Request error.
401	Unauthorized	The authentication information is not provided or is incorrect.
403	Forbidden	You are forbidden to access the page requested.
404	Not Found	The server failed to find the requested resource.
408	Request Timeout	The request timed out.
429	Too Many Requests	The number of requests exceeded the upper limit.
500	Internal Server Error	The server encountered an unexpected condition which prevented it from fulfilling the request.
503	Service Unavailable	The service is currently unavailable.

## 8.2 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Codes	Error Message	Description	Solution
400	LTS.0009	Failed to validate the request body.	Parameter verification failed.	Modify request parameters based on the returned error information and try again.
400	LTS.0010	The system encountered an internal error	An internal error occurred	An internal error occurred in LTS. Contact technical support.
400	LTS.0201	The log group is not existed	Failed to create the log stream because the associated log group does not exist.	Check whether the ID of the log group is correct.
400	LTS.0208	Log stream is associated by transfer	The log stream does not exist.	Check whether the log stream to be deleted exists.
400	LTS.0301	'*' and '?' not allowed as first character	Asterisks (*) and question marks (?) are placed in the middle or at the end of a keyword.	Check the keywords field based on the error information.
400	LTS.2001	Failed to create alarm rule	Creation error.	Check whether the project ID is correct.
400	LTS.2002	Failed to delete alarm rule	Deletion error.	Check whether the database or network connection is normal.

Status Code	Error Codes	Error Message	Description	Solution
400	LTS.2003	Failed to update alarm rule	Modification error.	Abnormal connection to the database. Check the database instance status.
400	LTS.2004	The size of alarm rule has exceed the limit: 200	The number of alarm rules cannot exceed 200.	Delete existing alarm rules that are no longer used.
400	LTS.2005	The parameter is incorrect	Incorrect parameter.	Correct the parameter based on the returned error information.
400	LTS.2006	Alarm rule name has already exist	The alarm rule name already exists.	Use another alarm rule name.
400	LTS.2007	Alarm rule not exist	The alarm rule does not exist.	Check whether the alarm rule exists.
400	LTS.2008	Find Alarm rule failed	Failed to query the alarm rule.	Check whether the database or network connection is normal.
400	LTS.2009	User must have SMN service authority	You must have the permissions on SMN.	Acquire the permissions on SMN.
400	LTS.2010	Topics cannot be empty	The SMN topic cannot be empty.	Check whether the SMN topic is empty.
400	LTS.2011	Alarm rule invalid query frequency or invalid cron expression	Invalid query frequency or cron expression.	Check the query frequency or cron expression.

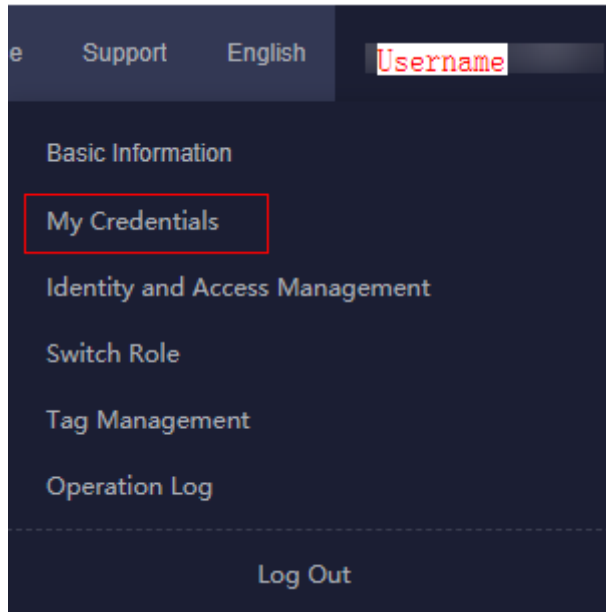
Status Code	Error Codes	Error Message	Description	Solution
400	LTS.2012	The query time range cannot be larger than 1 hour when the query frequency is less than every 5 minutes.	The query time range cannot be larger than 1 hour when the query frequency is less than every 5 minutes.	Check the query time range and query frequency.
400	LTS.2013	Send Subject Error	Incorrect SMN topic.	Correct the topic based on the error information.
403	LTS.0003	No permission.	Invalid role	Grant the LTS service permission.
403	LTS.0011	Invalid projectId	Invalid project ID.	Ensure that the project ID in the URL is the same as that in the token.
500	LTS.0107	Current user does not have the permission to operate this group	Failed to update the log group.	Abnormal connection to the database. Check the database instance status.

## 8.3 Obtaining the Account ID, Project ID, Log Group ID, and Log Stream ID

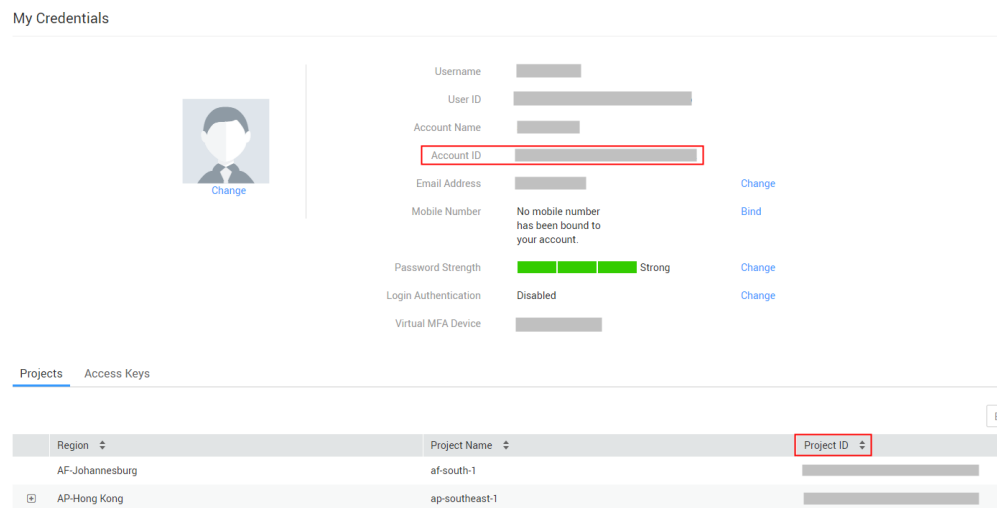
### Obtaining Account and Project IDs

Account and project IDs are required in URLs when you call some APIs.

1. Log in to the management console after you register an account.
2. Hover the mouse pointer over the username and choose **My Credentials** from the drop-down list.




3. On the **My Credentials** page, view the account and project IDs.



If there are multiple projects in one region, expand **Region** and obtain subproject IDs from the **Project ID** column.

## Obtaining Log Group and Log Stream IDs

1. Log in to the LTS console.
2. On the **Log Management** page, move the cursor to a log group name to view the log group ID.
3. Click  of the target log group and move the cursor to a log stream name to view the log stream ID.



## 8.4 Time Zone List for OBS Transfer

Name	ID	Offset
International Date Line West	Etc/GMT+12	UTC-12:00
Coordinated Universal Time-11	Etc/GMT+11	UTC-11:00
Aleutian Islands	America/Adak	UTC-10:00
Hawaii	Pacific/Honolulu	UTC-10:00
Marquesas Islands	Pacific/Marquesas	UTC-09:30
Alaska	America/Anchorage	UTC-09:00
Coordinated Universal Time-09	Etc/GMT+9	UTC-09:00
Pacific Time (US & Canada)	America/Los_Angeles	UTC-08:00
Baja California	America/Tijuana	UTC-08:00
Coordinated Universal Time-08	Etc/GMT+8	UTC-08:00
Chihuahua, La Paz, Mazatlan	America/Chihuahua	UTC-07:00
Mountain Time (US & Canada)	America/Denver	UTC-07:00
Arizona	America/Phoenix	UTC-07:00
Central Time (US & Canada)	America/Chicago	UTC-06:00
Central America	America/Guatemala	UTC-06:00
Guadalajara, Mexico City, Monterrey	America/Mexico_City	UTC-06:00
Saskatchewan	America/Regina	UTC-06:00
Easter Island	Pacific/Easter	UTC-06:00
Bogota, Lima, Quito, Rio Branco	America/Bogota	UTC-05:00
Chetumal	America/Cancun	UTC-05:00
Indiana (East)	America/Indianapolis	UTC-05:00
Peru	America/Lima	UTC-05:00
Eastern Time (US & Canada)	America/New_York	UTC-05:00
Haiti	America/Port-au-Prince	UTC-05:00

Name	ID	Offset
Asuncion	America/Asuncion	UTC-04:00
Caracas	America/Caracas	UTC-04:00
Cuiaba	America/Cuiaba	UTC-04:00
Turks and Caicos	America/Grand_Turk	UTC-04:00
Atlantic Time (Canada)	America/Halifax	UTC-04:00
Georgetown, La Paz, Manaus, San Juan	America/La_Paz	UTC-04:00
Santiago	America/Santiago	UTC-04:00
Newfoundland	America/St_Johns	UTC-03:30
Araguaina	America/Araguaina	UTC-03:00
Argentina	America/Argentina/Buenos_Aires	UTC-03:00
Salvador	America/Bahia	UTC-03:00
City of Buenos Aires	America/Buenos_Aires	UTC-03:00
Cayenne, Fortaleza	America/Cayenne	UTC-03:00
Greenland	America/Godthab	UTC-03:00
Saint Pierre and Miquelon	America/Miquelon	UTC-03:00
Montevideo	America/Montevideo	UTC-03:00
Brasilia	America/Sao_Paulo	UTC-03:00
Coordinated Universal Time-02	Etc/GMT+2	UTC-02:00
Azores	Atlantic/Azores	UTC-01:00
Cabo Verde Is.	Atlantic/Cape_Verde	UTC-01:00
Ghana	Africa/Accra	UTC
Coordinated Universal Time	Etc/GMT	UTC
Monrovia, Reykjavik	Atlantic/Reykjavik	UTC+00:00
Casablanca	Africa/Casablanca	UTC+00:00
Dublin, Edinburgh, Lisbon, London	Europe/London	UTC+00:00
West Central Africa	Africa/Lagos	UTC+01:00
Angola	Africa/Luanda	UTC+01:00
Windhoek	Africa/Windhoek	UTC+01:00

Name	ID	Offset
Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna	Europe/Berlin	UTC+01:00
Belgrade, Bratislava, Budapest, Ljubljana, Prague	Europe/Budapest	UTC+01:00
Brussels, Copenhagen, Madrid, Paris	Europe/Paris	UTC+01:00
Sarajevo, Skopje, Warsaw, Zagreb	Europe/Warsaw	UTC+01:00
Cairo	Africa/Cairo	UTC+02:00
Botswana	Africa/Gaborone	UTC+02:00
Zimbabwe	Africa/Harare	UTC+02:00
Harare, Pretoria	Africa/Johannesburg	UTC+02:00
Zambia	Africa/Lusaka	UTC+02:00
Mozambique	Africa/Maputo	UTC+02:00
Tripoli	Africa/Tripoli	UTC+02:00
Amman	Asia/Amman	UTC+02:00
Beirut	Asia/Beirut	UTC+02:00
Gaza, Hebron	Asia/Hebron	UTC+02:00
Jerusalem	Asia/Jerusalem	UTC+02:00
Athens, Bucharest	Europe/Bucharest	UTC+02:00
Chisinau	Europe/Chisinau	UTC+02:00
Kaliningrad	Europe/Kaliningrad	UTC+02:00
Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius	Europe/Kiev	UTC+02:00
Ethiopia	Africa/Addis_Ababa	UTC+03:00
Tanzania	Africa/Dar_es_Salaam	UTC+03:00
Nairobi	Africa/Nairobi	UTC+03:00
Baghdad	Asia/Baghdad	UTC+03:00
Kuwait, Riyadh	Asia/Riyadh	UTC+03:00
Istanbul	Europe/Istanbul	UTC+03:00
Minsk	Europe/Minsk	UTC+03:00

Name	ID	Offset
Moscow, St. Petersburg, Volgograd	Europe/Moscow	UTC+03:00
Baku	Asia/Baku	UTC+04:00
Abu Dhabi, Muscat	Asia/Dubai	UTC+04:00
Tbilisi	Asia/Tbilisi	UTC+04:00
Yerevan	Asia/Yerevan	UTC+04:00
Astrakhan, Ulyanovsk	Europe/Astrakhan	UTC+04:00
Izhevsk, Samara	Europe/Samara	UTC+04:00
Port Louis	Indian/Mauritius	UTC+04:00
Kabul	Asia/Kabul	UTC+04:30
Islamabad, Karachi	Asia/Karachi	UTC+05:00
Ashgabat, Tashkent	Asia/Tashkent	UTC+05:00
Ekaterinburg	Asia/Yekaterinburg	UTC+05:00
Chennai, Kolkata, Mumbai, New Delhi	Asia/Calcutta	UTC+05:30
Sri Jayawardenepura	Asia/Colombo	UTC+05:30
India	Asia/Kolkata	UTC+05:30
Nepal	Asia/Kathmandu	UTC+05:45
Kathmandu	Asia/Katmandu	UTC+05:45
Astana	Asia/Almaty	UTC+06:00
Dhaka	Asia/Dhaka	UTC+06:00
Omsk	Asia/Omsk	UTC+06:00
Yangon (Rangoon)	Asia/Rangoon	UTC+06:30
Myanmar	Asia/Yangon	UTC+06:30
Bangkok, Hanoi, Jakarta	Asia/Bangkok	UTC+07:00
Barnaul, Gorno-Altaysk	Asia/Barnaul	UTC+07:00
Vietnam	Asia/Ho_Chi_Minh	UTC+07:00
Hovd	Asia/Hovd	UTC+07:00
Indonesia	Asia/Jakarta	UTC+07:00
Krasnoyarsk	Asia/Krasnoyarsk	UTC+07:00
Novosibirsk	Asia/Novosibirsk	UTC+07:00

Name	ID	Offset
Cambodia	Asia/Phnom_Penh	UTC+07:00
Tomsk	Asia/Tomsk	UTC+07:00
Laos	Asia/Vientiane	UTC+07:00
Hong Kong (China)	Asia/Hong_Kong	UTC+08:00
Irkutsk	Asia/Irkutsk	UTC+08:00
Malaysia	Asia/Kuala_Lumpur	UTC+08:00
Macao (China)	Asia/Macao	UTC+08:00
Philippines	Asia/Manila	UTC+08:00
Beijing, Chongqing, Hong Kong, Urumqi	Asia/Shanghai	UTC+08:00
Kuala Lumpur, Singapore	Asia/Singapore	UTC+08:00
Taipei	Asia/Taipei	UTC+08:00
Ulaanbaatar	Asia/Ulaanbaatar	UTC+08:00
Perth	Australia/Perth	UTC+08:00
Eucla	Australia/Eucla	UTC+08:45
Chita	Asia/Chita	UTC+09:00
Seoul	Asia/Seoul	UTC+09:00
Osaka, Sapporo, Tokyo	Asia/Tokyo	UTC+09:00
Yakutsk	Asia/Yakutsk	UTC+09:00
Adelaide	Australia/Adelaide	UTC+09:30
Darwin	Australia/Darwin	UTC+09:30
Vladivostok	Asia/Vladivostok	UTC+10:00
Brisbane	Australia/Brisbane	UTC+10:00
Hobart	Australia/Hobart	UTC+10:00
Canberra, Melbourne, Sydney	Australia/Sydney	UTC+10:00
Guam, Port Moresby	Pacific/Port_Moresby	UTC+10:00
Lord Howe Island	Australia/Lord_Howe	UTC+10:30
Magadan	Asia/Magadan	UTC+11:00
Sakhalin	Asia/Sakhalin	UTC+11:00
Chokurdakh	Asia/Srednekolymsk	UTC+11:00

Name	ID	Offset
Bougainville Island	Pacific/Bougainville	UTC+11:00
Solomon Is., New Caledonia	Pacific/Guadalcanal	UTC+11:00
Norfolk Island	Pacific/Norfolk	UTC+11:00
Anadyr, Petropavlovsk-Kamchatsky	Asia/Kamchatka	UTC+12:00
Coordinated Universal Time +12	Etc/GMT-12	UTC+12:00
Auckland, Wellington	Pacific/Auckland	UTC+12:00
Fiji	Pacific/Fiji	UTC+12:00
Chatham Islands	Pacific/Chatham	UTC+12:45
Samoa	Pacific/Apia	UTC+13:00
Nuku alofa	Pacific/Tongatapu	UTC+13:00
Kiritimati Island	Pacific/Kiritimati	UTC+14:00